Illustrations OF SYPHILITIC AFFECTIONS OF THE BRAIN.

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NEARLY three years ago I took as the subject of the Lettsomian Lectures, delivered before the Medical Society of London, Syphilitic Affections of the Nervous System, stating the conclusions at which I had arrived by my own observations and from a study of the investigations of others, and relating numerous cases met with in my own practice. My present purpose is chiefly to relate cases of disease of the brain due to syphilis which I have seen since that time; but they may be preceded by a few general remarks. These relate to—

1. *The period at which syphilitic affections of the nervous system are met with.* This is usually at a late period of the disease, and it may be many years after the primary lesion. The longest I have known is forty years. Dr. Buzzard, however, finds that in a large proportion of cases in which the nervous system is affected the first attack is within five years. In rare instances acute inflammation of the brain or cord, sometimes attributed to tuberculosis, may come on about the time of the first outbreak of constitutional manifestations. More important, however, is—

2. *The stage of the disease at which the nervous system is liable to suffer.* As is well known, the lesions occurring at different periods of the same case of syphilis may be so entirely different in character and tendency that only prolonged experience warrants us in considering them as part of the same disease; whence the division into "secondary" and "tertiary" stages. Since, however, "tertiaries" may appear early, and "secondaries" persist late, and the line of demarcation between the two is far from being hard and fast, many observers do not recognise the distinction between them, and it is not uncommon to hear the phrase, "If a man has syphilis he has syphilis." The difference exists nevertheless, whether it is marked by a name or not, and as it is such as to influence treatment, I consider it important to retain the distinctive names. Syphilitic affections of the brain, then, for the most part belong to the tertiary stage (this term "tertiary" applying, however, not to the time, but to the character of the lesions), and are associated with gummata in the skin, muscles, and viscera, with nodes and disease of bone, and with destructive ulceration of the soft palate, skin, &c. As has been said, exceptional cases occur in the early part of the secondary period.

3. *The character of the lesion* is accordingly such as is met with in tertiary affections of other parts, and its progress is usually gradual. The lesions, again, are often multiple, rarely symmetrical. Syphilitic disease giving rise to cerebral symptoms may have its origin in the cranial bones and dura mater, or in the pia mater, or in the cerebral bloodvessels; and it is important that the seat of the lesion should be made out, since this will greatly influence the prognosis. If the dura mater or the bones are affected, recovery will usually be slow and relapses frequent, and if an artery has been blocked up, either by changes in its walls or by pressure of a growth outside it, the consequent softening, should the obstruction last long enough to produce this result, will remain, even though the cause may be removed.

4. It should be borne in mind that syphilitic visceral lesions may occur—I might almost say are especially liable to occur—when the secondary manifestations have been only slight. We must not at once accept a denial of syphilis as conclusive, but examine the throat, skin, and bones for evidences, and make detailed inquiries respecting all previous ailments. This is especially necessary in the case of women. Even men, with no motive or desire for concealment, and ready to confess venereal accidents, will refuse to acknowledge syphilis, of which they bear evident tokens, and I am convinced that medical men often disguise the disease to their patients under some pseudonym. Women are of course, as a rule, kept in ignorance, and the few who know that they have suffered from syphilis have usually the strongest reasons for concealment of the fact; so that, as I have frequently said, it is useless always, and often cruel, to ask a woman in so many words if she has had syphilis. In women, again, we have the fact that when the disease is communicated, not directly from the husband, but indirectly through a fœtus begotten by a syphilitic father, the very first syphilitic manifestations may be tertiary visceral lesions. I have, for instance, met with cases, such as the following, in a station of life and under circumstances which absolutely exclude the idea of irregularities on the part of the wife before marriage. A healthy young girl marries a man who has had syphilis, has a miscarriage, or a series of miscarriages, perhaps at so early a period of gestation that she is uncertain whether pregnancy ever existed. Her health becomes impaired, but she presents no symptoms which the medical attendant recognises as syphilitic till ten or twelve years after marriage. She has then paralysis of cranial nerves, with marked syphilitic cachexia, nocturnal pains and nodes.

5. The only other subject on which I desire to remark is the treatment and its results. The treatment is that familiar to all—iodide of potassium, which in my practice is sometimes associated with, and almost always concluded by, a mild course of mercury. The average dose of iodide of potassium is from twenty to thirty grains three times a day, which is reached by rapid steps from six or eight grains given at first. The larger doses are necessary. I have repeatedly seen relapses, when the dose has been at ten or twelve grains, checked and cured by a rise to twenty-four or thirty-six grains. I have given a drachm every four hours for a short time; and one patient came to me who had for two or three months taken this quantity three times a day with advantage, under the direction of his family medical attendant, who had "bettered" my advice after a previous consultation with me. On the other hand, I have met with cases in which a single grain of iodide of potassium produced great depression and other injurious effects; in these one quarter or half a grain may do all the good, or iodide of sodium or of ammonium may be tolerated.

When I give mercury at the same time with iodide of potassium, it is in the form of biniodide or bichloride; when the potash salt has been left off, either one of these or hydrargyrum cum creta with quinine.

As regards relapses, it is true they are common, and a constant look-out and guard against them are necessary; but my experience leads me to conclude that the disease can be worn out, so to speak. I see or hear of from time to time a large proportion of the cases I reported in my lectures. Most remain well; some I have lost sight of; but I have heard of no death.

Mr. Hutchinson has suspected iodide of potassium of giving rise to Bright's disease. I have met with nothing to support this idea; indeed, I find in this salt one of my most trustworthy remedies for the high arterial tension which often precedes the establishment of contracted granular disease of the kidney, or rather for the condition of blood and tissues which I consider to be the cause at once of the arterial tension and of the renal mischief.

My experience does not yet extend over a sufficiently long period of time, or embrace a sufficient number of cases, to decide this point; but I may quote one example of immunity from this evil consequence after prolonged administration of the drug, and of complete recovery from severe syphilitic disease of the brain. It is the case of a man whom I first saw in 1864, who had been maniacal, and who at that time was quite imbecile and suffered from frequent attacks of grand and petit mal. He took iodide of potassium at intervals for seven years, when I lost sight of him and thought him dead. I met him, however, in the street a short time since, and learnt from him that he had remained quite well, and was earning a living for himself and a large family.

My interest is primarily in diseases of the brain, and only in a subordinate degree in syphilis; and in relating the cases, I propose to make comments on any points of

physiological and pathological interest which they may present.

CASE 1. *Pain in head, vomiting, convulsions, double optic neuritis; later convulsions ceasing, gradual supervention of paralysis; death from exhaustion by bed sores; syphilitic disease of body of sphenoid and adjacent meninges.* — Augusta M——, aged thirty-four years, married, was admitted into St. Mary's Hospital Nov. 6th, 1874, and died Jan. 31st, 1875. She had never been very strong, but her health had been moderately good. The only syphilitic history obtained was of ulcerations in the throat four years before she came under observation; but after her death it was ascertained that she had borne syphilitic children, and had long been under treatment for syphilis. On May 25th, 1874, she had a "fit," and had been subject to them ever since, sometimes having nine or ten a day, then being free for four or five days. She had also suffered much pain in the head, and had frequent purposeless vomiting and occasional attacks of dyspnœa.

When admitted she was languid, weak, and faint; had no appetite, and did not sleep; started up in the night terrified; she had severe continuous frontal headache, and frequent vomiting. Pulse weak and intermittent; temperature 98°. The face was drawn to the right and flattened on the left side; the tongue deviated to the right; no difference in the strength of the two hands. Sight had been failing for three weeks. With the right eye the patient could not count the fingers; with the left was unable to read very large print; pupils equal. On ophthalmoscopic examination, the optic discs were only identified by convergence of retinal vessels; not defined, elevated, vascular, woolly-looking; veins large and tortuous, partly hid near centre of disc, and again near margin; no arteries visible; hæmorrhages in various places, and in different stages; right disc paler than left. On the day of her admission the patient had three or four fits, and next day two. They began with a scream, the face was distorted, the tongue bitten, and there were violent movements of the legs. Iodide of potassium was prescribed in doses of fifteen grains three times a day, increased a week later (Nov. 13th) to thirty grains.

The fits were rather less frequent, and at first she felt better, but the sleeplessness and want of appetite continued, the sight got worse, the ophthalmoscope showing aggravation of the optic neuritis, or rather ischæmia; and shifting pains came on, one day in the back between the shoulders, another in the head and spine, another in the chest and left side, or in the stomach and back.

Nov. 20th.—The convulsive attacks were found to begin with a scream. This was followed by rhythmical movements of the arms, which were flexed and extended at the elbows, and after about five minutes consciousness was lost, the face being drawn to the right, and the head and eyes turned to the right. The temperature remained at 98° or 98·4°. The urine had a specific gravity of 1030, and at times contained sugar.

For a fortnight the condition of the patient got gradually worse, and she began to pass the fæces in bed. At this time (Nov. 21st) one-twelfth of a grain of bichloride of mercury was given twice a day, in addition to the iodide of potassium, and at night twenty grains of chloral, and fifteen grains of bromide of potassium; a blister also was applied to the right temple. After the 23rd there were no more convulsions, the pain in the head became less severe, the vomiting ceased, and the optic ischæmia retrogressed, the sight improving. Her motions were, however, passed under her, the catheter was required, and bedsores began to form. So greatly were the nutritive functions impaired that if she lay for a night with one leg across the other, a blister was produced at the points of contact. At this time there was no motor paralysis or obvious loss of sensation. Gradually, although the headache ceased, and the intellect became quite clear, the patient being cheerful, feeling better, and eating and sleeping well, she began to suffer pain when moved, and this increased till her screams when she was turned in bed were such as to render proper attention to the bedsores impossible. Her legs became rigidly contracted, and lying constantly, as she did, in one position on her right side, with the knees drawn up, the bedsores became terrible. She then gradually lost power, first in the right arm then in the left, so that on Jan. 10th she was quite unable to feed herself. She grew weaker, but slept better, was cheerful, and regained vision, the ischæmia of the disc subsiding. On Jan. 31st, after a stay of nearly three months in the hospital, she died from exhaustion, remaining sensible to the last.

The post-mortem examination was unfortunately incomplete, in consequence of the opposition of friends. The head was opened, notwithstanding an express refusal of permission and threats of legal proceedings, but nothing more could be done, and even this had to be done hurriedly. The bones of the cranial vault, the dura mater, the pia mater, and convolutions, were apparently healthy, only a little effusion and faint opacity being seen over the hemispheres; nothing wrong in fissures of Sylvius. The only morbid change apparent when the brain was removed and examined was a dense white opaque fibrous thickening of the pia mater over the interpeduncular space, hiding the corpora albicantia and optic commissure, and stretching to the adjacent part of the tempero-sphenoidal lobe, the uncinate gyrus and lobule. Into this white membrane the vertebral artery plunged; its branches were greatly narrowed, but were all pervious. The corpora albicantia were left clean and in a normal condition when the membrane was stripped off; it adhered more closely to the optic commissure, but the thickening did not extend to the anterior edge of the commissure. No softening anywhere. Hemispheres, central ganglia, cerebellum, pons, and medulla apparently healthy, the latter, however, appearing smaller and firmer than usual. No evidence of morbid change extending down the cord. On examining the base of the cranium, the dura mater over the anterior end of the basilar process and the sella turcica was dark-coloured, soft, and easily detached. The posterior clinoid processes were pink, soft, and exceedingly fragile. When the dura mater was removed, the sphenoidal cells were laid open, the thin lamina of bone over them having almost disappeared. The right shoulder-joint and both knee joints were opened by bedsores, and the crest of the right ilium laid bare.

An interesting question was, unfortunately, left unsolved in consequence of the opposition of the friends to a post-mortem examination. There had evidently been a periosteal node on the body of the sphenoid bone, and this, with the inflammation of contiguous pia mater over the interpeduncular space, had given rise to the convulsions and double optic neuritis. The original disease, however, appears to have yielded to treatment, since no traces of the node itself remained except the staining and softening of the dura mater and bone. With subsidence of the mischief here coincided no doubt the cessation of convulsions, headache, and vomiting, and the improvement in the sight and mental faculties. While improving in these respects, however, the sphincters of the bladder and rectum lost control over their respective organs, the nutrition of the lower extremities gave evidence of extraordinary impairment, and the patient began to suffer severe pain when moved, quite independently of the bedsores, which were rapidly forming, the legs also gradually assuming a contracted position, and at a later period the arms losing power. These new symptoms might, on the one hand, be attributable to the mischief done at the base of the brain, or, on the other, to syphilitic inflammation of the cord. It is quite possible for a cerebral lesion to give rise to the rapid sloughing of the skin and other tissues which here took place, and (probably by descending sclerosis of the lateral columns of the cord) to the rigidity and contraction of the lower extremities, and from the continuity of the symptoms it appeared as if the later phenomena belonged to a later stage of the same morbid process to which the earlier disturbances had been due. The paralysis, it is true, was paraplegic, but the intracranial lesion was in a situation in which it would affect both motor tracts, and the paralysis of the arms coming on gradually at a later period than in the legs, and preceded by sloughing of the skin over the shoulder, was more likely to result from further development of the effects of a cerebral lesion than from extension of mischief upwards along the cord.

In connexion with this case may be mentioned one which has recently (October, 1876) come under observation. The patient, a coachman, was sent to me at St. Mary's Hospital by Mr. Towers Smith. He had had syphilitic disease of the bones of the nose, and has recently began to suffer from convulsions, which are ushered in by a peculiar sensation in the epigastrium, and begin with sudden loss of consciousness. It is not unlikely that disease may now have attacked

the roof of the nasal cavity, and it is interesting to note in connexion with this conjecture the epigastric aura.

CASE 2. *Convulsions, pain in head, traces of old optic neuritis; death in a fit; extensive disease of dura mater over frontal region.* — A policeman aged thirty (?) was admitted into St. Mary's Hospital on March 20th, 1874, and left, greatly relieved, on April 23rd. He had had syphilis eight years before, but had otherwise enjoyed good health till four years previous to his admission, when he received a blow on the head in a street row, in consequence of which he was off duty for five months. Since that time he had resumed his post, but had never been the same man. He had had four or five fits, and for eighteen months had suffered severe pain in the head, especially in the occipital region, and had been very drowsy.

At first he lay in bed quiet and sullen, taking little notice of surroundings. His mental condition and temper were peculiar. At night he was noisy and inclined to be violent. Expression heavy and indicating great suffering. The pain in the head was worse at night. The right hand felt numb, but there was no motor paralysis. Speech was indistinct. The optic discs showed traces of old neuritis, had a pearly look, and some of the vessels were partly hid. He had several fits, in which there were general convulsions and loss of consciousness.

Mercury was given up to April 1st; after which, as there was no obvious improvement, iodide of potassium was substituted in gradually increasing doses; upon this the improvement was rapid, and the patient went out by his own desire, greatly relieved, on April 23rd. He continued to take the iodide as out-patient. Some weeks afterwards, one day, on leaving home, he said he felt better than he had done since the injury, and while out had a fit, in which he died.

The body was taken to the St. Marylebone Workhouse, from which place notice of his death was sent to me, and I obtained a post-mortem examination. The dura mater was firmly adherent both to the bone and to the convolutions over a great part of the upper aspect of the hemispheres. The adhesion to the brain was most intimate over the frontal lobes, and the dura mater had here to be dissected off. Its inner surface was studded with small firm tumours about the size of a split pea; and in the meshes of the adhesions there was a thick gum-like fluid in considerable quantity. The convolutions were wasted, especially the second and first frontal. The arteries were not occluded, nor was there softening of brain-substance. Syphilitic deposits were found in the liver and kidneys.

This case is an illustration of the effects of external violence in determining a local development of tertiary syphilitic disease. Up to the time of his admission the case had been considered and treated as simply traumatic in origin, and I looked upon it as such at first. The nocturnal pain and excitement caused me to entertain a suspicion of syphilis as the cause, and a distinct history of the disease was obtained.

Convulsions are well known to be a frequent effect of disease affecting the surface of the cerebral hemispheres, and, in my experience, when so caused, are specially liable to be fatal. Of four cases of sudden death in a convulsive paroxysm, which have come under my notice, not due to hæmorrhage or bursting of cerebral abscess, one was the foregoing; in another there was pachymeningitis starting from the cicatrix of a closed cerebral abscess; in two there was chronic thickening of the cranial vault. Sometimes the immediate cause of death is asphyxia, either by accidental suffocation or by spasm of glottis, or by arrest of respiratory movement in the convulsion. Cases, however, occur in which the mode of death is by asthenia.

(To be continued.)

DRIFFIELD COTTAGE HOSPITAL.—Last week the annual meeting of the subscribers to this institution was held in the Mechanics' Hall, Mr. H. Angas presiding. The report showed that during the past year 49 in-patients and 85 out-patients had received the benefits of the institution. The cost of management had amounted to £253 19s. 9d., and the collections and subscriptions, together with a balance of 1s 8d from last account, to £291 18s. 9d., leaving a balance in the treasurer's hands of £37 19s. A small debt which was weighing on the hospital was happily cleared off at the meeting by a donation from the managers of the Driffield Allotment Gardens.

THE

EFFECT OF PROLONGED MUSCULAR EXERCISE UPON THE URINE IN RELATION TO THE SOURCE OF MUSCULAR POWER.

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THE last volume of THE LANCET* contains the results of the observations I conducted upon Weston and Perkins during their pedestrian performances at the Agricultural Hall. I only supplied at the time a simple record of facts observed, and promised on a future occasion to discuss their bearings in relation to the source of muscular power. The amount of labour incurred by the calculations to be made with respect to the urine and food has prevented the earlier fulfilment of my design, but I have now before me the data brought into a form applicable for the deduction of conclusions.

It is now an established doctrine that force, like matter, can be neither created nor destroyed. The different forms of force are mutually convertible the one into the other, but they have their definite reciprocal equivalents, and in the transmutation the existing force undergoes no increase or decrease. The force liberated by a certain amount of chemical action will produce a certain amount of heat, and this, in its turn, may be made to accomplish a certain amount of mechanical work. The chemical action has its representative amount of heat, and the heat its representative amount of mechanical work; and the relative value of each is susceptible of being expressed in definite terms. It has been ascertained, for instance, that the force derived from chemical action which will raise the temperature of a pound of water 1° Fah. will, under another mode of manifestation, lift 772 pounds one foot high; 772 foot-pounds are then said to constitute the dynamic equivalent of 1° of heat of Fahrenheit's scale.

What is true of force in the inorganic world is equally applicable in the organic. The force manifested by living beings has its source by transmutation from other forms which have pre-existed. The food of animals contains force in a latent state. Properly regarded, food must be looked upon, not simply as so much ponderable matter, but as matter holding locked-up force. By the play of changes occurring in the body the force becomes liberated, and is manifested as muscular action, nervous action, assimilative, secretory, or nutritive action, heat, &c. The food supplied from without is directly or indirectly the source of all these manifestations, and it is with regard to the manner in which the manifestation occurs as muscular action that the data furnished by the pedestrian performances under consideration will concern us.

According to the well-known doctrine propounded by Liebig, the motor power of muscular action arises from the oxidation of muscular tissue. This implies a coincident destruction of muscular tissue with the manifestation of muscular power, and such occurrence should lead to a corresponding production, and subsequent elimination, of nitrogen containing principles of disintegration. As a part of the doctrine, it was affirmed that the elimination of urea was related to the muscular work performed. This proposition seems to have been taken for granted without seeking for experimental evidence in support of it. Men argued as though it were an established fact that muscular work involved a corresponding elimination of urea. Gradually, however, the progress of scientific inquiry began to raise a doubt which afterwards instigated the performance of direct experimental researches upon the subject.

Voit experimented upon a dog, and ascertained the amount of urea voided during rest and forced exercise. The results showed no material increase produced by the exercise.

Dr. E. Smith found in the case of the prisoners upon whom he conducted observations at Coldbath-fields prison that the labour of the treadmill did not to any material extent increase the discharge of urea.

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* THE LANCET, Feb. 26th, March 4th, 11th, 18th, and 25th.

To Fick and Wislicenus science is indebted for the decisive blow which threw discredit upon Liebig's theory. In the observations which these experimentalists conducted upon themselves, it was shown that under the exertion of ascending a high mountain, undertaken during the consumption of non-nitrogenous food, less urea was eliminated than had been done previously and was done afterwards. There was a decided relationship between the food ingested and urea eliminated, but no influence was traceable to the muscular work performed.

The late Dr. Parkes undertook several series of carefully conducted investigations to test the validity of Fick and Wislicenus's results. They were made upon healthy soldiers placed upon fixed diets. The urine excreted during rest and active exercise was collected and examined, and nothing was observed to lend support to the view that muscular work proceeded from muscle oxidation.

Dr. Austin Flint, jun., availed himself of some of Weston's pedestrian performances in America, and attempts to show that the results obtained are contradictory to recent reactionary views. He asserts* that "excessive and prolonged muscular exertion increases enormously the excretion of urea," and concludes that "the excess of nitrogen discharged is due to an increased disassimilation of the muscular substance." I shall have occasion further on to refer to Dr. Flint's results and compare them with my own, and to discuss the grounds upon which his conclusion is founded.

The main point for which these observations were undertaken was to ascertain what evidence was presented in proof or disproof of muscular work being the result of muscular disintegration. It necessarily follows that disintegration must be attended with the elimination in some shape or other of the nitrogenous elements entering into the constitution of the muscular tissue, for physiology teaches us that the elements of the compounds which have served their purpose in the economy are not suffered to remain and accumulate, but are discharged under the form of certain known effete combinations. We have to look, therefore, amongst the effete products discharged from the body, and estimate the amount of nitrogen which finds its exit.

Before any evidence adduced upon this question can be accepted as reliable, we must be sure that we have a correct representation of the nitrogen which is evolved as a product of disintegration. The only channels through which an elimination from the body can occur are the skin, lungs, alimentary canal, and kidneys.

In opposition to what was formerly asserted, it does not appear that nitrogen escapes to any appreciable extent with the breath or perspiration. With the improved methods of analysis introduced by modern discovery, several trustworthy observers have recorded, within a very close approach, an equivalent amount of nitrogen from the urinary and intestinal excreta to that which has been introduced into the system with the food. Dr. Parkes confidently asserted that it may be looked upon as established that an amount of nitrogen is discharged through the kidney and intestine equivalent to that which enters with the food. The outgoing through these channels being equal to the ingoing with the food, leaves none for escape, certainly to any significant extent, in any other way.

The nitrogen discharged from the intestine with the alvine evacuations is derived from the unabsorbed secretions of the alimentary canal and the undigested alimentary residue. It has no relation to tissue destruction; and, from the nature of events associated with its voidance, its proportion alike to the nitrogen ingested and the total nitrogen eliminated is subject to much incidental daily variation.

It is only, therefore, the urine that we have to look to as affording the channel through which the exit of nitrogen arising from the metamorphosis of nitrogenous matter in the system takes place. The main form under which the nitrogen escapes in the urine is, in the human subject, as urea; and this was carefully estimated by Liebig's mercuric nitrate process, and each result checked by the evolution of nitrogen produced by the hypobromite solution in Russell and West's apparatus. The nitrogen in the uric acid was also taken into account. Upon several occasions an actual determination of the nitrogen by combustion analysis was made, to ascertain if the results given by the other processes yielded correct information, and a close approximation between the calculated and determined nitrogen was obtained.

The settlement of the question under consideration has an interest beyond the mere abstract physiological knowledge supplied. Upon what occurs as the result of muscular action will depend the kind of food best suited to meet the demands of hard labour. If the muscular tissue is really consumed in the manifestation of muscular power, fresh muscle must be produced, and this would involve the necessity of a supply of nitrogenous alimentary matter equivalent to that destroyed. Nitrogenous matter would thus form an all-important element of alimentation in relation to muscular work. Liebig, indeed, appraised the value of different articles of food by the amount of nitrogenous matter they contained. If, on the other hand, the muscles form an instrumental agency for the liberation of force as mechanical power in the same way as the locomotive serves for liberating and manifesting the force contained in the fuel consumed as motion, and the force may be derived, as is now contended, from non-nitrogenous as well as nitrogenous food, the position of dietetics becomes materially altered. The question therefore has an important practical bearing in relation to alimentation; and such being the case, I feel that no further excuse need be offered for the space that will be required for the details about to be presented.

In the records of the observations published at the time the pedestrian performances were being undertaken an account was given of the food consumed. The account simply comprised a statement of the various articles that were taken, and said nothing about the amount of nitrogen they contained. To render the observations upon the urine of service it is necessary that the ingoing nitrogen should be known. This has now been calculated from the daily dietary that was published, and will be represented in the tabular arrangement to be given. Instead of simply stating, however, the numerical results, I think it will be more satisfactory to supply the data upon which the calculations were based. Standard authorities have been selected for the analyses taken. In the case of a few of the articles consumed, owing to the absence of published data, an original nitrogen determination had to be undertaken. As a comparison will afterwards be made between the results presented by my own observations and those obtained by Dr. Flint, it may be stated that no material difference exists in our basis of nitrogen calculation applied to the food. This remark is needful, inasmuch as it will be subsequently seen that the nitrogen shown to have been ingested by Weston in England is considerably greater than that represented by Dr. Flint as having been ingested in America.

BASIS OF CALCULATION OF THE AMOUNT OF NITROGEN CONTAINED IN THE VARIOUS ARTICLES OF FOOD CONSUMED.

Beef, *Mutton*, and *Chicken*, are reckoned as containing 3·5 per cent. of nitrogen. This is the percentage given by Payen* for roast beef; 15·31 grains of nitrogen has accordingly to be allowed for each ounce (avoirdupois) of cooked meat.

Pork.—The pork consumed consisted of fat pickled pork, which had been cooked with haricot beans. It was only eaten during the period of rest. The estimate of nitrogen is taken from the composition in Letheby's table, giving 9·8 per cent. of albuminates=1·5 per cent. of nitrogen. According to this percentage one ounce contains 6·64 grains of nitrogen.

Bacon.—Bacon was only eaten by Perkins during his day of rest. The nitrogen is calculated from the composition of dried bacon in Letheby's table, which gives 8·8 per cent. of albuminates=1·35 per cent. of nitrogen. One ounce thus contains 4·90 grains of nitrogen.

Cod-fish (*fresh*) and *Sole* are reckoned as containing 1·91 per cent. of nitrogen (Payen), which is equivalent to 8·35 grains per ounce.

Cod-fish (*salted*) was only consumed in the form of rissole. Payen represents it as containing 5·02 per cent. of nitrogen= 21·96 grains per ounce.

Jelly.—Reckoning that 1 quart of jelly contains 1¼ oz. of dry gelatin, and that gelatin contains 16 per cent. of

* New York Medical Journal, June, 1871.

* Substances Alimentaires, par M. Payen. Paris, 1865, p. 488

nitrogen, we have 2·62 grains of nitrogen as the amount belonging to each fluid ounce of jelly.

Beef-tea, made from fresh meat, was taken by Perkins, and only upon a few occasions in small quantities by Weston. 1·55 grains to the fluid ounce is the quantity of nitrogen allowed, these figures being obtained, from the mean amount of solid residue given by five samples examined in my laboratory, and reckoning that the organic portion, free from fat, contains 15·5 per cent. of nitrogen.

Liebig's Extract of Meat.—For obtaining the required information in this case an actual determination of the nitrogen was made by combustion analysis. The mean of two analyses gave 8·625 per cent. of nitrogen, which is equivalent to 37·73 grains to the ounce (by weight). The beef-tea, made from Liebig's extract, which was taken by Weston, was prepared by adding one teaspoonful (estimated to represent 100 grains) to ten fluid ounces of water. Calculation upon the basis of the above chemical composition of Liebig's extract gives ·8625 grain as the amount of nitrogen in each fluid ounce of the beef-tea.

Brand's Essence of Beef.—The mean of two combustion analyses performed for this investigation gave 1·602 per cent. of nitrogen. The specific gravity of the product was 1036·6. From these data it may be stated that one ounce by weight contained 4·37 grains, and one ounce by measure 4·51 grains of nitrogen. The product was found to contain 9·5 per cent. of solid matter.

Brand's Concentrated Beef-tea.—In the absence of a knowledge of its composition, this product had also to be subjected to analysis. The mean of two combustion analyses indicated the presence of 7·49 per cent. of nitrogen, which gives 32·76 grains as the amount per ounce.

Mock Turtle Soup.—Each ounce by measure of soup is reckoned as containing 4·14 grains of nitrogen. These figures are derived from an analysis of the article conducted in my laboratory.

Eggs (whole).—The average weight of eggs is 2 oz., and this is taken as the weight of the eggs consumed. With 1·9 per cent. of nitrogen (Payen), the amount of nitrogen to be allowed for each egg is 16·62 grains.

Eggs (yelks).—The yelk is estimated as equivalent to 30 per cent. of the entire egg, and, according to Letheby, it contains 16 per cent. of albuminates. Calculation upon these data gives 6·45 grains as the amount of nitrogen in each yelk.

Milk.—The composition of average London milk is taken as the basis of calculation. This is computed to contain 3·22 per cent. of nitrogenous matter or casein, and to possess a specific gravity of 1028. Thus constituted, the quantity of casein in each fluid ounce is 14·48 grains, and this is equivalent to 2·22 grains of nitrogen.

Dr. Flint allows a rather larger proportion of nitrogen, and such would exist in milk of the best quality.

Cheese is taken as containing 4·126 per cent. of nitrogen (Payen) = 19·68 grains per ounce.

Butter is reckoned as containing ·64 per cent. of nitrogen (Payen) = 2·80 grains per ounce.

Where bread spread with butter appears in the list, the slice of bread is reckoned as covered with two-fifths of an ounce of butter = 1·12 grains of nitrogen.

Bread.—For each ounce of bread 4·68 grains of nitrogen are allowed, this being the proportion derived from Payen's analysis of household bread, which gives 1·07 as the percentage of nitrogen present.

A slice of bread is reckoned as weighing 2 oz. Dry toast is reckoned as bread after the addition of one-eighth of its weight for loss of water.

Huntley and Palmer's Osborne Biscuits.—According to Letheby's tables, biscuit contains 15·6 per cent. of albuminates. This is equivalent to 2·4 per cent. of nitrogen. Allowing an average weight of 308 grains, 7·39 grains is the quantity of nitrogen to be assigned to each biscuit.

Peek, Frean, and Co.'s Milk Biscuits.—With an average weight of 92 grains, the amount of nitrogen to be allowed for each of these biscuits is 2·20 grains.

Pudding is reckoned as bread with an additional 20 per cent. of water.

Custard Pudding has been dealt with in the same manner as by Flint. The average of milk and eggs gives 1·28 per cent. of nitrogen, or 5·60 grains of nitrogen to each ounce.

Rice Pudding is reckoned, after Flint, as containing 1·18 per cent. of nitrogen, or 5·06 grains per ounce.

Buckwheat Cakes.—With 2·20 per cent. of nitrogen (Payen), and an average weight of 2½ oz., the amount of nitrogen to be allowed for each cake is 24·06 grains.

Oatmeal, according to Payen, contains 1·95 per cent. of nitrogen. This percentage is equivalent to 8·53 grains per ounce.

Oatmeal Gruel is estimated as containing ·376 grain of nitrogen to the fluid ounce. These are the figures given by Flint from actual analysis for his investigation.

Sea-moss Farina Blancmange has been assumed to contain from probable composition 1 grain of nitrogen per ounce. Mr. Weston's stock of this article having been exhausted, and none being attainable in England, no opportunity was afforded of ascertaining the composition by actual analysis.

Potatoes, according to Payen, contain ·33 per cent. of nitrogen. This is equivalent to 1·44 grains per ounce.

Cabbage is reckoned as containing 1·34 grains of nitrogen per ounce, the estimates being derived from 2 per cent. of albuminates (Parkes) = ·307 per cent. of nitrogen.

Haricot Beans in the dried state contain 3·92 per cent. of nitrogen (Payen), = 17·15 grains per ounce. Four ounces of cooked beans were found to be equivalent to 1¼ oz. of the dried article. One tablespoonful of cooked beans was reckoned from observation as representing 375 grains of dried haricots = 14·7 grains of nitrogen.

Figs, dried, have been taken as containing ·92 per cent. of nitrogen (Payen). This gives 4·02 grains per ounce.

Beer is reckoned as containing ·08 per cent. of nitrogen (Payen), which gives ·35 grain per fluid ounce.

Tea and Coffee.—An allowance of ·087 grain of nitrogen per fluid ounce has been made for tea (infusion), and ·481 grain per fluid ounce for coffee, these figures being derived by calculation from Payen's analyses.

No account has been taken, in consequence of its insignificance, of the nitrogen in grapes, prunes, oranges, jam, brandy, and sherry.

(To be continued.)

HARVEY AND CESALPINUS.

A SECOND HISTORICAL FRAGMENT.

BY SAMPSON GAMGEE, F.R.S. EDIN.,

SURGEON TO THE QUEEN'S HOSPITAL, BIRMINGHAM, FOREIGN CORRESPONDING MEMBER OF THE SOCIETY OF SURGERY OF PARIS.

THE history of the discovery of the leading truths, which have influenced the progress and wellbeing of mankind, has always possessed a deep interest for the learned of all countries, and a charm for learners of all classes. The circulation of the blood is a notable illustration of this general rule; and the interest in this particular discovery is just now exceptionally high, in this country and in Italy, the birthplace and professional *alma mater* of William Harvey. With the approach of his tercentenary (1878), rival memorials are projected—to him at Folkestone, his birthplace,* and to Andrea Cesalpino at Pisa, where he taught, and at Rome, where he died. Another claim to the great honour has been urged with so much erudition and persistence by Ercolani, of Bologna,† on behalf of Carlo Ruini, that, *in memoriam*, a marble tablet adorns one of the halls of that ancient seat of learning. Not content with endorsing the elaborate plea of Prof. Ceradini on behalf of Cesalpinus, contemporary Italians propose to charge Harvey with conscious plagiarism of the philosopher of Arezzo, by inscribing over the portals of the University of Pisa this explicit accusation:—"Male sibi consuluit Harveus ille Anglus, hanc qui sibi maximi veritatem momenti ausus anno MDCXXVIII. est decernere."

In a preceding historical fragment, favoured with publication in these columns,‡ I quoted Moreri in evidence that

* Harvey Tercentenary (1878) Memorial. Report of the Proceedings of the Public Meeting convened at the Town Hall, Folkestone, Nov. 6th, 1871, by Thomas Corister, Esq., Mayor of Folkestone.

† Ricerche Storico-analitiche sugli Scrittori di Veterinaria. Per G. B. Ercolani. Torino, 1815. Vol. I., pp. 442, 462.

‡ THE LANCET, Nov. 11th, 1876.

the plea on behalf of Cesalpinus is only a revival. It has been repeatedly urged and vigorously combated, not merely by Harvey's countrymen, but by the learned of France and Germany, aye, and of Italy itself.

M. de Senac said in 1749 that we cannot doubt that "the foundations of the circulation had been established by Cesalpinus," and he then proceeds with critical acumen to point out the great errors which veiled the truth he had foreshadowed ("la vérité qu'il avoit entrevue est obscurcie par des erreurs grossières.")* A practically identical judgment, though much more influential as coming from a most learned and classical Italian, is that of the Abate Girolamo Tiraboschi†:—"Andrea Cesalpino, gathering together the observations already made by others, although without naming them, framed therewith a more exact description of the circulation through the heart; but he, too, fell into error when he passed on to speak of what happens through the remainder of the body."‡

To his great credit, it must particularly be noted that Cesalpinus proved experimentally the capital fact, that when a vein is tied, it fills below, and not above, the ligature;§ and Bayle‖ only did the Aretine naturalist justice by quoting this remarkable passage from his Questiones Peripateticæ (lib. 5, cap. 4, fol. 125). "The lungs therefore drawing the warm blood from the right ventricle of the heart, through a vein like an artery, and returning it by anastomosis to the venal artery (pulmonary vein), which tends towards the left ventricle of the heart, and air being in the meantime transmitted through the channels of the aspera arteria, which are extended near the venal artery, yet not communicating with the aperture as Galen thought, tempers with a touch only. *This circulation of the blood* (huic sanguinis circulatione) from the right ventricle of the heart through the lungs into the left ventricle of the same exactly agrees with what appears from dissection. For there are two receptacles ending in the right ventricle, and two in the left. But of the two, only one intromits; the other lets out, the membranes (valves) being constituted accordingly."

This is undoubtedly a wonderful passage; and if it could be proved that it had influenced the schools, and been adopted into, and promulgated with, the teaching of the great centre of medical learning where Harvey studied, the chances of Cesalpinus would stand very high indeed for the rival honour. But I adhere to the opinion expressed in the previous paper on this subject—that Cesalpinus' teaching on this matter never made much way. Bunker represents him as a philosopher; it is known that he was a great botanist and mineralogist; and there is very good reason for believing that much of his anatomical and physiological lore was scarcely known to his contemporaries. The testimony of Gaspard Hoffmann is conclusive in proving that while Cesalpinus was ending his long life in the serene atmosphere of the Vatican, the busy halls of Padua took little or no heed of the doctrine of the circulation which he had sketched so wonderfully. Born at Gotha in 1572, after studying at Strasbourg and Altdorf, Gaspard Hoffmann went to Padua in 1602, the self-same year that Harvey left it to return to England. The Nestor Fabricius ab Aquapendente was still one of the chief personal glories of the Republic of Venice and of the University of Padua. Under him Hoffmann studied, as Harvey and a generation of anatomists had done before him. Yet, when Hoffmann returned to Nuremberg, where he taught for forty years, he persistently opposed Harvey's doctrine, and was not even converted by the personal demonstrations with which he was honoured by the illustrious Englishman. If the teaching of Cesalpinus had made way—if the doctrine of the circulation had been correctly taught in Padua after Harvey left it, and while Hoffmann studied there, would he not, learned and accomplished as he was, have placed the fact on record?*

But whatever the cogency of this line of argument, the claim for Andrea Cesalpino, as now revived by his countrymen, must be considered on its merits. Professor Ceradini, of Genoa, has been the leading champion in this contention; and his claim for the philosopher of Arezzo is much larger and more ambitious than was ever before advanced. He sets aside Vesalius, Realdus Columbus, and their contemporaries; and contends that, after Galen, the circulation of the blood was not discovered by degrees, or by the work of many, but *ex abrupto*, through the exclusive and wholly personal work of Cesalpinus. Equally decisive is the Genoese professor in preferring against Harvey a charge of conscious plagiarism, and he sustains his case with much erudition and ingenuity; but, with much deference I say it, his enthusiasm is, *primâ facie*, too fervid to be consistent with the cool severity of an impersonal judgment. If I do not examine his authorities and arguments now, it is because I have hitherto only had an opportunity of studying the first edition of his monograph, which was kindly forwarded to me by Professor Corrado-Tommasi-Crudeli. Only while correcting this proof have I been favoured by Professor Ceradini with the second edition‡ of his memoir, which, in copiousness and arrangement, marks a notable advance on his first production, full and eloquent though that was. By the same post a promise has reached me from Rome that early copies will be forwarded of Professor Scalchi's discourse on this historical controversy, and also of the oration of Professor Maggiorani, the distinguished President of the Royal Medical Academy of Rome.

It seems best to reserve the analysis of the modern Italian case until the evidence for Cesalpinus can be gone into in its entirety, and it will then be most convenient to examine Ercolani's claim for Senator Ruini.

Deeply as I venerate the memory of Cesalpinus—and he was, beyond question, one of the great Italians who made the sixteenth century glorious for their country and for the world,—I am open to evidence that he was even more original, more laborious, and more successful in warring for the truth, than has hitherto been held proven. But enough evidence is before us to justify an appeal to his admirers to be satisfied with doing him honour, without attempting to stain Harvey's escutcheon. The modern Italians might well be content with the judgment of Tiraboschi,‡ who argued that if the glory of the discovery of the circulation of the blood is to be conceded to William Harvey, he was a pupil of the Italian school. No one can doubt the immense advantages which the English lad, just fresh from Caius-Gonvil College, must have enjoyed during his five years' stay in Padua, where the chair of anatomy was filled by the direct successor of Vesalius and Fallopius. Harvey did thirteen years' hard work after his return to England before he was placed in the chair of Anatomy and Surgery by the College of Physicians. Thirteen years more elapsed before he published his great essay, and yet another twenty-one years before he penned his first disquisition with a view to convert to his teaching John Riolan, jun., of Paris, the Coryphæus of anatomists. That *labor improbus* of wellnigh half a century, in the steps, by the laws, for the truth, of experimental and inductive philosophy, is THE GLORY, above all others, of William Harvey. Italy has always been a great nursery for men. "In Italia la pianta uomo bene ci cresce." To no one would I yield in admiration of that intellect which, in science, as in letters and in art, from the days of the Accademia del Cimento to our own, has sustained, through countless vicissitudes, its proud title to the admiration and gratitude of mankind. Great as are the obligations of this country to the Italians in almost all branches of knowledge, it may strictly be urged that the severity of the English intellect and the indefatigable stamina and singularly happy blending of our race, have enabled it to achieve conquests in mind and matter which challenge detraction. No two nations can so well afford to venerate

* Traité de la Structure du Cœur, de son Action et de ses Maladies. Par M. de Senac. Séconde Edition, tom. i., p. 83, et seq. Paris, 1783.

† Storia della Letteratura Italiana. Nuova Edizione. Tomo vii., parte i., p. 639-40. Firenze, 1809.

‡ See also Dottrina della Circolazione del Sangue in Storia Prammatica della Medicina di Curzio Sprengel, tradotta dal Sig. Arrigoni, accresciuta dal Francesco Freschi di Piacenza, p. 215, et seq. (Firenze, 1831, vol. 3rd); Flourens' Histoire de la Découverte de la Circulation du Sang, p. 18—23 (Paris, 1854); and Bérard's Cours de Physiologie fait à la Faculté de Médecine de Paris, 1851, vol. iii., p. 562 et seq.

§ "Ex vinculo intumescunt venæ ultrà locum apprehensum, non citrà; quod experimento sciunt qui venam secant; ..... quia tument venæ ultrà vinculum non citrà. Debuisset autem opposito modo contingere, si motus sanguinis et spiritus à visceribus fit in totum corpus."—*Questionum Medicarum*, lib. ii.

‖ Historical and Critical Dictionary, 2nd edit. (London, 1735), vol. ii., p. 411, article "Cesalpinus."

* Dezeimeris's Dictionnaire Historique de la Médecine, t. v., p. 226; Paris, 1868. Willis's Life of Harvey, Syd. Soc. ed., p. xliii.

† La Scoperta della Circolazione del Sangue, appunti Storico-Critici del Dott. G. Ceradini, Prof. di Fisiologia all' Università di Genova. Nuova edizione, rifatta ed aumentata. Milano, 1876. p. 332.

‡ Op. cit., p. 643.

each other's worthies. After all, the cherished memories of bygone ages are the world's treasures; all men grow better, and kinder, and happier, in loving them, and leniently, while jealously, judging them for their greatnesses and for their faults, be they Harveys or Cesalpini, independently of the contracting influences of national predilections, and in deference only to the paramount claims of historical justice.

Birmingham.

FOUR CONSECUTIVE CASES OF OVARIOTOMY.

BY THOMAS WHITESIDE HIME, B.A., M.B., &c.,

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(*Concluded from p.* 319.)

CASE 3.—Mrs. W——, aged forty-two, had always been healthy in early life, began menstruating at the age of fifteen years and a half, married at twenty-one; has had four children at full term, and miscarried between the first two and also between the last two. On Shrove-Tuesday, 1875, first noticed that her abdomen was enlarged uniformly, and from that time she increased rapidly in size. She menstruated regularly up to and after being operated on. About October, 1875, she began to suffer from severe dragging pain in the right hip and groin, and her general health was at the same time affected. In October, 1875, the following measurements were taken:—

	Inches.
Circumference of body	32½
Right anterior superior spine of ilium to umbilicus ...	8
Left „ „ „ „ „ ...	8½
Ensiform cartilage to os pubis	5¾

Uterus two inches and a half long, movable; the os slightly patulous; the breasts very much atrophied. The apex of the heart was situated exactly beneath the left nipple, where its impulse could be very distinctly felt; the base of the heart did not seem to be correspondingly elevated in the thorax, but, judging from the character of the second sound, was displaced backwards. Neither in the anterior nor posterior vaginal cul de sac could any trace of the tumour be perceived.

Operation.—On Nov. 25th, 1875, the patient was narcotised with ether, ten ounces being required, and twenty-five minutes being spent in its administration. When once under its influence, the patient continued perfectly still. On cutting down on the tumour through the linea alba I found no adhesions, and passing my hand at once into the abdomen, I found a single sac, nowhere adherent, attached by a pedicle about two inches and a half wide and one inch and a half long to the right broad ligament; the uterus free; the left ovary healthy. I half emptied the sac and tied the orifice, then withdrawing it from the abdomen, I tied the pedicle in two parts with carbolised gut, and having detached the sac, returned the pedicle to the abdomen; the "toilet" of the peritoneum was carefully made with sponges wrung out of warm solution of carbolic acid (5 per 100), and the abdominal wound closed with deep and superficial sutures of carbolised gut, the peritoneum being included in the former. The wound was dressed with antiseptic dressings, but not under the spray. The operation lasted in all but twelve minutes.

There was a good deal of sickness for some days. On the third day I dressed the wound under the carbolic spray, and found it united throughout by first intention, the thin superficial sutures having come away. From the second till the fifth day the urine was loaded with lithates. On the fourth day there was a discharge of about one ounce of mucus from the rectum. On the eleventh day she began menstruating, it being the usual time. The course of the temperature was as follows:—

	Morning.	Evening.
Day before operation ...	... 98·4°	... 98·2°
Day of operation ...	... 98·8	... 99
1st day after operation	... 98·8	... 98·6
2nd „ „ ...	... 99·4	... 99·6
3rd „ „ ...	... 102·2	... 100·2
4th „ „ ...	... 100	... 99·4
5th „ „ ...	... 100	... 99
6th „ „ ...	... 99·2	... 99·2
7th „ „ ...	... 98·4	... 98·4
8th „ „ ...	... 98·2	... —

On the eighth day the bowels were opened by an enema, and a mutton chop was allowed. Not a drop of pus was seen in the wound throughout. The patient was discharged on the thirty-fourth day, cured.

CASE 4.—Mrs. I——, from Dronfield, aged forty, married at twenty, admitted to the Women's Hospital April 4th, 1876; only once pregnant, at the end of twelve months' marriage; child died in twenty-four hours. Began to menstruate before twelve. Father died of a "tumour" of the breast, which she heard described as cancer. Was always healthy until 1866, when she had a long illness, and lost her voice completely for two years. First noticed a swelling in left groin seven years ago. It grew very slowly, and caused no inconvenience, but about the same date began to suffer from dysmenorrhœa. After two years she went under treatment for the enlargement, and was tapped. There were drawn off

First tapping,	March 8th, 1871...	...	18 pints.
Second „	Jan., 1871	...	22 „
Third „	June, 1872	...	17 „
Fourth „	Nov., 1872	...	15 „
Fifth „	Sept., 1873	...	27 „
Sixth „	June, 1874	...	31 „
Seventh „	March, 1875	...	33 „
Eighth „	Oct., 1875	...	41 „
Ninth „	March, 1876	...	43 „
Total	...	...	20 galls. 7 pints.

After the third tapping a silver cannula was left *in situ*, with the intention of keeping up a constant drainage, but it had to be removed owing to the pain it caused. She suffered little from the frequent tappings, and always diminished in size greatly after them until after the seventh, when there was a solid residue in the right groin. The uterus was of ordinary size, movable, but displaced, the fundus being pressed down to the left, and the portio vaginæ elevated towards the right side. The following measurements were taken:—

	April 10th.	July 1st.
Circumference	35 inches	... 39 inches.
Right anterior superior spine of ilium to umbilicus ...	10 „	... 10 „
Left ditto...	9 „	... 10½ „
Symphysis to ditto	9 „	... 9½ „
Ensiform cartilage to ditto ...	10 „	... 8½ „

The pulse seldom sank below 100, sometimes reached 110, and the temperature normally oscillated about 100° F. The patient was, however, apparently in pretty good health, and had a good appetite; left lung rather dull. There was a troublesome cough without expectoration.

Operation (at 1 P.M., July 6th, 1876).—At 7 A.M. patient had a good breakfast of chop, toast, and coffee, and beef-tea at 10 30 A.M.* Ether was administered at first, subsequently chloroform. The operation was conducted on antiseptic principles in every respect, except that the spray was not used. I made the usual incision in the linea alba, and twisted four small vessels in the abdominal wall as I cut down on the peritoneum. When this was divided, the patient suddenly became livid and her respiration ceased. Artificial respiration was actively maintained for some minutes, at the risk of rupturing the sac, and she soon recovered herself. The peritoneum was adherent over the whole anterior wall. When endeavouring to attach the

* It is my rule to order patients a good breakfast before operation. I do not find it increases the liability to sickness after anæsthetics, and I am certain that it enables the patient to withstand the shock, and resist the effects of the anæsthetics, better than the ordinary plan of allowing little or no solid food on such occasions. A patient operated on, thus fasting, and who is sick for twenty-four hours after, must necessarily be greatly exhausted.

sac-wall to the trocar, after puncturing, it tore, and as it was very thin I enlarged the opening in the sac, and allowed the contents to run direct into the bucket, none escaping into the abdomen, as the adhesions of the sac were still unseparated. Having emptied and sponged out the sac with carbolic lotion, I detached it from the anterior abdominal wall, to which it was everywhere adherent. The omentum was adherent at two places, which I tied with carbolised gut,* and divided with scissors. I also tied three bleeding arteries in it, wounded during the operation. Posteriorly the sac was very adherent in the pelvis, over the whole of the left and part of the right iliac fossæ. As I could not detach this part, I cut it off with scissors, and left the adherent portion undisturbed. Another very strong adhesion existed below the left false ribs; this I tied with gut and divided, leaving the attached part in position. Many small vessels torn in separating the peritoneal adhesions had to be twisted. The pedicle sprang from the left broad ligament, about a quarter of an inch from uterus. It was thin, soft, and about two inches wide. As there was a good deal of bleeding from the sac wall, I tied the pedicle early in two sections with carbolised gut, and divided it, thus cutting off the source of hæmorrhage. I applied ice freely to the peritoneal wall for some time to check oozing from minute vessels, and, having very carefully performed the "toilet" of the peritoneum with sponges wrung out of warm carbolic solution (5 per 100), I closed the abdominal wound with deep and superficial ligatures of gut (the former embracing the peritoneum), the abdomen having been an hour and a half open. The wound was covered with regular antiseptic dressing.

There was a little sickness for two days. After forty-eight hours I dressed the wound under carbolic spray, and found it all healed, without the formation of a drop of pus. It was not dressed again for six days, and then it was as sweet as if there had been no wound at all. On the second day she ate two eggs; on the fifth she had chicken. On the third day she began to menstruate—four or five days earlier than usual. She menstruated normally a month later, but not again up to the present date. The temperature ran high, as will be seen by the following. Wunderlich states that it is "quite exceptional" for traumatic fever to rise to 40·5° C. (=104·9° F.)*

	Morning.		Evening.	
	Rectum.	Axilla.	Rectum.	Axilla.
Day befor operation	100° F. ...	—	99·4° F.	—
Morning of „	100°	... ...	—	—
Immediately after operation	99·8°	... —	103°	—
First day after operation	102°	... —	105°	—
Second day after operation (menstruating)...	102°	... 101·4°	103·6° ...	102°
Third „ „	101·4°	... 100°	102·6° ...	99·6°
Fourth „ „	101·6°	... 100°	102° ...	100°
Fifth „ „	102°	... 99·8°	103° ...	100·4°
Sixth „ „	101·4°	... 99·6°	104° ...	101°
Seventh „ „	101·6°	... 100·6°	102·6° ...	100·6°
Eighth „ „	100·2°	... 98°	101·4° ...	99°
Ninth „ „	100·4°	... 99°	100·8° ...	99°
Tenth „ „	100·8°	... 98·6°	101·4° ...	99°
Eleventh „ „	100·6°	... 99·4°	102° ...	100°

The temperature in the rectum continued from 99° to 100·8°. On the eighth day the bowels were open; on the eighteenth she was up; and on the twenty-fifth she left the hospital for her home, some six miles distant.

I saw the patient on Nov. 6th, when she looked plump and well, and felt, she said, "as well as ever in my life."

Sheffield.

* This gut had been nearly two years in steep, and was in excellent condition.

ON THE

IMMUNITY FROM SMALL-POX SECURED BY REVACCINATION.

BY THOMAS N. ORCHARD, M.D.

THE epidemic of small-pox which has prevailed in Manchester and Salford during the past twelve months has been the means of affording some valuable statistics, which prove in a remarkable manner the protective influence of revaccination against this loathsome disease.

In the township of Pendleton, which includes the western division of the borough of Salford, the epidemic raged with greater severity than in any other part of the town, and it is principally to this district that my remarks will apply. The disease assumed an epidemic form at the commencement of last December, and continued with more or less severity until the end of May. During the summer months it declined considerably, but since the beginning of October it has increased in severity, and at present there are no signs of its abatement. Large numbers of persons availed themselves of the opportunity of being revaccinated, and this desire on the part of the people to protect themselves has had a most beneficial effect in limiting and restraining the severity of the epidemic.

At the request of some of the mill-owners in this neighbourhood I visited the mills and revaccinated as many of the operatives as desired to be done. The total number revaccinated was about 700. The managers and overlookers undertook to inquire into every case of sickness arising among them, and promised to report to me any case of small-pox occurring among those who had been successfully revaccinated. They have all declared that after careful observation and inquiry they have not heard of one case of small-pox having occurred among those that had been successfully revaccinated. I was informed of one case in which the girl was seized with small-pox the day after she was revaccinated. The appearance of the disease so soon after vaccination proved that she must have caught the infection previous to being revaccinated. It was a mild case. A manager informed me of a young woman who desired to be revaccinated, but her mother, being opposed to vaccination, would not give her consent. In a fortnight after the girl was seized with small-pox and died. All these revaccinations were done in less than a fortnight, during the month of May last, when the epidemic was at its height.

The information given me by the managers at the mills can be thoroughly relied upon; several of them at first doubted the value of revaccination, and one was opposed to it. I have, since the commencement of the epidemic, revaccinated altogether about 1700 persons, and have heard of no case of small-pox having occurred among them, only I cannot vouch for them all in the same manner as I can for those who were revaccinated at the mills. Mr. Stocks, the medical officer to the Salford Union Hospital, has reported that, out of 538 cases of small-pox admitted into the hospital, there was not one patient found among them who had been previously successfully revaccinated. These facts seem to prove that it is almost impossible for a person recently revaccinated to take small-pox, and one cannot help coming to the conclusion that if, on the occurrence of an outbreak of small-pox, all persons liable to infection were revaccinated the disease would be immediately stamped out.

An instance in support of what I have just stated occurred at the Manchester Workhouse Schools, at Swinton, where there are between 500 and 600 children kept. On the 4th of last June, a case of small-pox occurred among them, and by the 22nd of the month there were twenty-three

* Das Verhalten der Eigenwärme in Krankheiten.

children admitted into hospital suffering from it. The majority of the cases were mild, and all completely recovered. Speaking of the advantages of revaccination, Dr. Williams, the medical officer, goes on to say that the number operated upon was 586, their ages varying from seven to fifteen years. In 324 cases, or rather more than one-half, the operation was successful, the effect in a great number being equal to primary vaccination; in 99 cases the result was fair, but decidedly modified by previous vaccination; and in the remaining 163 cases there was little or no effect. Dr. Williams concludes by saying that his "experience at Swinton schools showed clearly two things—(1) that revaccination at once arrested the spread of small-pox, for although up to the time of revaccinating the boys, two or three cases a day were sent to the infirmary, not a single case occurred after the vaccination had time to take effect; and (2) that after seven years the effect of primary vaccination is, in the majority of cases, more or less worn out, and that revaccination is absolutely necessary."

I have been favoured with the following analysis of the small-pox cases admitted into the Salford Union Hospital since the commencement of the epidemic. From Oct. 4th, 1875, to Nov. 14th, 1876, the number of cases admitted was 538, and of these 103 died.

	Cases.	Deaths.	Rate per 100.
Cases vaccinated	361	30	8·31
„ unvaccinated ...	79	37	46·83
No cicatrix	76	30	39·47
Doubtful if vaccinated ...	22	6	27·27
	538	103	

Those included under "no cicatrix" were cases in which the patients were too ill when admitted to be able to tell if they had been vaccinated, and others had no recollection of having been done. Their arms showed no marks of vaccination. The "doubtful cases" were those in which there was some resemblance of a cicatrix, and in a few of them there was no record kept as to whether they had been vaccinated.

The information given in this communication, which so conclusively proves the value both of vaccination and revaccination, ought to induce those who are endeavouring by means of leaflets, pamphlets, and unreasonable abuse, to prejudice persons unable to judge for themselves, to consider that they are incurring a serious responsibility in trying to mislead the public regarding an important and valuable remedy which has been the means of saving thousands of lives.

Pendleton, Manchester.

A Mirror OF HOSPITAL PRACTICE, BRITISH AND FOREIGN.

Nulla autem est alia pro certo noscendi via, nisi quamplurimas et morborum et dissectionum historias, tum aliorum, tum proprias collectas habere, et inter se comparare.—MORGAGNI *De Sed. et Caus. Morb.*, lib. iv. Proœmium.

GUY'S HOSPITAL.

CASES OF COMPOUND FRACTURE IN WHICH THE WOUNDS WERE CLOSED WITH COMPRESSES SOAKED IN COMPOUND TINCTURE OF BENZOIN.

(Under the care of Mr. BRYANT.)

WE commence this week an interesting series of fourteen consecutive cases of compound fracture treated by Mr. Bryant by closing the wound as soon as possible after the accident with lint saturated with compound tincture of benzoin. The favourable opinion which, from frequent inspections, we had formed of this clean and simple mode of practice led us to examine the records of a large number of cases. A perusal of the subjoined notes shows that the results obtained are almost uniformly satisfactory.

CASE 1. *Compound comminuted fracture of bones of leg; wound sealed by compound tincture of benzoin; recovery, with good limb.* (Reported by Dr. E. Hicks.)—Michael M——, aged sixty-six, an intemperate cab-driver, was admitted on August 7th, 1871, with a compound comminuted fracture of the left leg. The injury was produced from the kick of a horse, and was therefore direct, the fracture being at the junction of the middle and lower thirds of the limb. A piece of bone projected through a lacerated wound, and the skin was severely bruised, and there was much venous bleeding. The dresser, Mr. Peacock, acting on Mr. Bryant's suggestion, at once reduced the fracture, and closed the wound with several pieces of lint saturated with the compound tincture of benzoin, fixing the limb upon a posterior splint, with two lateral ones, and swinging it. No pain or constitutional disturbance of any kind followed the accident. When the lint was removed on the twenty-fifth day, the wound had completely healed, and the fracture united. On Sept. 15th a stiff apparatus was applied, and on Oct. 3rd the man left the hospital well.

CASE 2. *Compound comminuted fracture of the tibia and fibula; wound sealed with the compound tincture of benzoin; recovery.* (Reported by Mr. Fry.)—William B——, aged twenty-four, a warehouseman, was admitted Nov. 25th, 1871, with a compound comminuted fracture of the left tibia and fibula. It had been caused by a weight falling upon the limb and crushing it. The man was carried to the hospital immediately after the accident. The dresser, Mr. Burgess, detected a comminuted fracture of both bones of the leg at the lower third, and a contused wound of the integument covering the bones and communicating with them.

The wound was at once cleaned, and then sealed with pieces of lint saturated with the compound tincture of benzoin. The leg was then put up with a posterior and two lateral splints, resting on a swing. No constitutional or local trouble followed, and the dressing was not disturbed till Dec. 25th—that is, for twenty-seven days after the accident,—when it was taken away, the wound having healed and the fracture consolidated.

A flannel gum-and-chalk bandage was then put on and the man got up. He left the hospital on Jan. 19th, with a good leg, well.

CASE 3. *Compound fracture of leg; wound sealed with the compound tincture of benzoin; recovery.* (Reported by Mr. St. C. Shadwell.) — Albert G——, a drayman, aged eighteen, was admitted on the 13th March, 1872, with compound fracture of the leg at the junction of lower with middle thirds. While driving in a low van, his horse kicked up behind and struck him on the upper part of the right leg. He fell on one side into the van, and was conveyed at once to hospital. On admission he was unable to stand, and lost a great deal of blood from the wound.

The wound was sealed with compound tincture of benzoin, and the leg was put up on a back and two side splints. The patient slept well, and was not at all feverish, but complained of pain about the seat of injury.

March 15th.—Temperature 97·8°, and from this time to the 8th April he progressed most favourably. The benzoin dressings were then removed, and the wound was found to have scabbed over; two days later the splints were taken off. Union was complete.

April 18th.—The leg was put up in gum-and-chalk bandages extending from the foot to five inches above the knee. He got up on the 22nd, and left the hospital on the 26th.

CASE 4. *Compound fracture of left tibia and fibula; compress of compound tincture of benzoin; recovery.* (Reported by Mr. D. T. Evans.)—I. K——, a carrier, aged thirty-two, was admitted on Nov. 15th, 1872, with a severe compound fracture of the tibia and fibula at the junction of the middle and lower thirds of the limb; the bone protruded. He complained of great pain and coldness in the limb. Whilst he was alighting from his cart his foot slipped off the step, and he fell, the wheel passing over his leg. He was quite insensible after the accident, and unable to move his leg.

The day after admission, the wounds of the skin over the fractures were covered with lint saturated with compound tincture of benzoin, and the limb placed on a posterior splint with two side-splints, and swung in a cradle.

Nov. 18th.—Pulse 80, regular and strong; temperature 99·6°. He slept badly in the night, on account of violent twitchings of the limb, and he complained of pain in the ankle-joint. He passed his water freely, but it was high-

coloured and cloudy. His bowels were confined, and he was troubled with a cough, which gave him great pain about the tenth rib on the right side; he had no expectoration.

19th.—Pulse 88; temperature 98·8°. He had great pain in the back, which prevented him sleeping, but he took ten grains of chloral hydrate three times a day. His cough was better, and he had no pain in his leg.

20th.—Pulse 84; temperature 99·2°.

21st.—Pulse 96; temperature 99·2°.

25th.—The cough had subsided, he slept well, and had no pain in his leg, and he took quinine mixture three times a day.

31st.—The benzoin dressings were taken off; the wound had healed entirely by scabbing. The splints were removed, and the tibia was found to have united pretty evenly. The patient was quite well in himself.

Jan. 3rd.—The leg was put up with gum-chalk and flannel; the union of the fragments was very even, and a slight amount of callus was thrown out.

LONDON HOSPITAL.

COMPOUND COMMINUTED FRACTURE OF TOES; SYME'S AMPUTATION; ANTISEPTIC DRESSING; RECOVERY.

(Under the care of Mr. RIVINGTON.)

NATHANIEL T——, aged seventeen, was admitted on Sunday, January 16th, 1876. He had fallen under the wheels of a tender in motion. The right foot was bruised and lacerated; all the toes were either crushed or smashed, and were detached from the metacarpal bones. The soft parts on the dorsum were badly contused, and those in the sole were separated and bruised as far as the tuberosities of the os calcis. It was found impossible to save any part of the foot, the sound tissues just admitting of Syme's amputation. The malleoli were removed, but the cartilaginous surface of the tibia was left. After the completion of the operation the leg was thoroughly cleansed with carbolic-acid lotion (1 in 19), and the surfaces of the flaps washed with a chloride-of-zinc solution (1 in 40). Drainage-tubes were inserted, and the antiseptic-gauze dressing was applied. In the evening the pulse and temperature were nearly normal. As there was some pain in the stump, a hypodermic (one-third of a grain of morphia) was given.

Jan. 17th.—Stump redressed antiseptically under the spray. Temperature 99·4° F.

19th.—Stump redressed under the spray. Wound quite healthy; no putrefaction. Temperature 99°; pulse 90.

21st.—Temperature 100·4°.

22nd.—Some redness and swelling along the inner side of the leg, due to inflammation of a lymphatic vessel; lead lotion applied. Very little pain. In the afternoon the stump was dressed for the third time since the operation. Some purulent discharge, but no decomposition. One or two sutures removed; one or two of the inguinal glands are enlarged. Temperature 100·2°.

25th.—Redressed. Swelling of glands subsiding; tenderness and redness along the limb gone. Temperature 99·4°.

27th.—Stump redressed. Quite antiseptic. Some ulceration at the edges of the flaps where the soft parts were bruised at the time of operation. Ligatures on the vessels have all come away. Flap supported by strips of gauze dipped in carbolic lotion. Temperature 99·4°.

31st.—Dressings changed. Considerable discharge of pure sweet pus. Temperature 99·4°.

Feb. 2nd.—Stump redressed; quite antiseptic. Temperature 99°.

7th.—Fresh dressing. A good deal of discharge, but not excessive, considering that five days have elapsed since the last dressing. Union at the edges slow, and cicatrisation of ulcerated granulating surface on the inside of the stump delayed by the carbolic acid. The patient has been free from pain since the last dressing; has slept well and taken his food well; indeed he has done this since the first two or three days after the operation. Temperature 99·2°.

Longer intervals were allowed between the dressings until the stump had nearly healed, when the antiseptic dressing was given up, as cicatrisation at the edges went on very slowly. A collection of pus formed in the lower part of the stump and was evacuated, the opening closing readily. The patient had an excellent stump, and was discharged in April.

The general impression derived from the case was that the constitutional disturbance was much diminished by the antiseptic treatment, whilst suppuration along the sheaths of the tendons, which sometimes gives trouble in Syme's amputation, was entirely absent.

LAMBETH INFIRMARY.

DISEASE OF THE STERNO-CLAVICULAR ARTICULATION.

(Under the care of Mr. HAMERTON.)

As disease occurring primarily in the sterno-clavicular articulation is not fully described in works on surgery, the subjoined account of the three cases may be read with interest.

CASE 1.—S. J——, aged forty-two, a shoemaker, was admitted on Feb. 11th, 1875, complaining of a swelling, about the size of a hen's egg, situated over the left sterno-clavicular articulation. He stated that he had only noticed it a few days before, and gave as its cause lifting a heavy weight. The swelling was painful, very tense, and fluctuating. An opening was made into it, and exit given to a large quantity of pus. On passing a probe into the cavity, dead bone could be distinctly felt, and pressure on the clavicle anteriorly produced a grating. The cavity was washed out with a lotion of carbolic acid and water twice a day, and the arm was kept at rest with the view of obtaining anchylosis; but the man died eight months afterwards of phthisis, probably accelerated by the protracted suppuration. No post-mortem examination could be obtained.

CASE 2.—W. E——, aged thirty-three years, an engineer, was admitted on August 28th, 1876, with a sinus situated immediately below the right clavicle and half an inch to the right of sternum. He stated that he had enjoyed good health up to five weeks before, when he noticed a swelling near the inner end of the right collar-bone. He consulted a chemist, who considered it an abscess, and opened it, giving exit to a small quantity of matter. When he applied at the infirmary he was much emaciated by very profuse suppuration, which had continued since the opening was made. A probe was introduced, its course being directly upwards, without detecting diseased bone. The sinus was syringed with carbolic lotion, a nourishing diet was ordered, and he was kept in bed in order to give the joint as much rest as possible. At first the patient improved, and the suppuration and pain diminished, but on the twelfth day he complained of cough, and on examining the chest signs of pneumonia were present. He got rapidly worse, with symptoms of pyæmia, and died on September 18th.

Autopsy, seven hours and a half after death.—The sinus led up to the right sterno-clavicular articulation, which was completely destroyed, a portion of the inner end of the clavicle being separated and lying loose; the sternum was not diseased. Small abscesses were found in the brain, heart, lungs, liver, and spleen. Left kidney large, weighing twelve ounces, in other respects healthy; right small, weighing two ounces and a half. There were no purulent collections in any of the joints except the one diseased.

CASE 3.—J. C——, aged sixty-four years, a labourer, was admitted on Feb. 23rd, 1876, complaining of pain and swelling over left sterno-clavicular articulation, which he had first noticed a month before. He had always enjoyed very good health, with the exception of a slight cough in the winter. As the swelling increased and gave great pain, it was opened, and exit given to some thick, jelly-like fluid. The wound healed, and apparently the swelling was less, and the patient said he felt better. In a month, however, the swelling became much larger, and a second opening was made; this time pus escaped. A probe was passed, and dead bone distinctly felt. The cavity was then syringed out twice a day; suppuration continued, and a small sinus appeared about two inches below the incision, which was immediately over the inner end of the clavicle. Although a probe would not pass from one opening to the other, the lotion could be injected through. As the patient was getting lower every day from the profuse suppuration, it was decided to remove the sternal end of the clavicle, without waiting for the separation of the dead part. Dr. Lloyd, who examined the case, acquiesced in this. The only fear was

that the disease might not be entirely localised in the joint, but that some of the ribs might also be affected, this opinion being based on the existence of the lower sinus.

On Sept. 23rd, Mr. Hamerton proceeded to remove the diseased bone by an incision three inches long, extending from the upper piece of the sternum to the inner third of the clavicle. The joint being exposed, a portion of the sternal end of the clavicle, about an inch long, was found to be necrosed throughout the entire thickness of the bone. The dead portion was twisted off with a pair of necrosis forceps. All the loose portions of diseased bone were then removed. With the finger introduced into the opening, some roughening on the anterior edge of the first rib, close to the cartilage, could be felt. The lower sinus was therefore laid open, so that the wound was T-shaped, the cavity was packed with lint, and the edges of the transverse incision were brought together with silver-wire sutures, the vertical portion being left for drainage. The patient rapidly improved. The cavity was washed out with a lotion composed of a drachm of hydrochloric acid to a pint of water, and at the end of a week it became filled up. On Oct. 16th there was only a very small portion of the vertical incision not healed, all suppuration had ceased, and the man was able to sit up, the arm being securely bandaged to the side.

Remarks.—The cause of the disease in each case was obscure. No history of injury, syphilis, gout, or rheumatism could be elicited, although it is highly probable that a blow or fall sufficient to cause the disease might have occurred without attracting special attention. The great difficulty in the treatment was to keep the parts at rest. Mr. Hamerton found the best way to do so was to fix the arm to the side, keep the patient in bed on his back, not allowing him to sit up, but propping up the shoulders with pillows. Even then the sterno-mastoid tended to disturb the clavicle whenever the patient moved his head. Mr. Hilton, in his lectures on Rest and Pain, suggests fixing the head by a bandage or fillet round it, and then fastened to the arm. The best description of this disease is contained in these lectures. Mr. Erichsen has also recorded a case in this journal (April, 1864).

BIRMINGHAM GENERAL HOSPITAL.

TRANSPOSITION OF THORACIC AND ABDOMINAL VISCERA.

FOR the following description and remarks we are indebted to Mr. William Moxon.

Edward H——, aged forty-eight years, a railway carriage washer, alleged to have been crushed between buffers, was admitted on Sept. 11th, 1876, at 8.30 A.M., in a state of collapse, and died half an hour afterwards.

Autopsy, twenty-seven hours after death.—The body was muscular and well developed. There was very little post-mortem congestion, but the rigor mortis was well marked. On removing the skull-cap, the brain and its membranes were found to be in a perfectly healthy state; the only abnormal condition being the extreme thickness of the skull, which, in the frontal and occipital regions, measured from half to five-eighths of an inch in thickness. On opening the thorax the following relation of its contents was observed:—Heart: The apex of this organ was directed downwards and to the right side, and corresponded to a point two inches below and one inch to the sternal side of the right nipple. The base of the organ was directed across the median line towards the left side to the extent of about an inch. The upper border of the right ventricle extended to the third left costal cartilage. The anterior surface, as usual, was formed by the right ventricle; the posterior surface by the left. The arch of the aorta took its origin from the latter cavity, and passed in a direction from right to left, but describing a little larger curve than normally. The relation of the vessels arising from its arch was quite normal. The right auricle received the superior and inferior vena cava, the right ventricle the pulmonary artery, the left auricle the pulmonary veins, and the left ventricle the aorta. The right lung was smaller and increased in length, and notched to receive the heart. The whole of the thoracic viscera were in a very healthy condition.—Abdomen: On opening this cavity it was found filled with dark fluid blood, which was seen to be due to a rupture of liver-substance situated on the under aspect of the right (large) lobe, near the entrance of the inferior vena cava. The large lobe, usually termed the right, in this case occupied the left hypochondriac region. The smaller lobe, usually termed the left, occupied part of the right hypochondrium. The stomach was situated on the right side, and in normal relation with the liver. The bile-ducts, together with the pancreatic duct, opened into the descending portion of the duodenum. The spleen occupied its normal relations to the surface of the body, stomach, &c., and was placed on the right side of the abdominal cavity. The kidneys were two in number, perfectly healthy, and in their usual position. The intestines were entirely reversed. The cæcal valve occupied the left iliac fossa, together with the commencement of the cæcum. The ascending colon was situated on the left side, and entirely surrounded by peritoneum. The transverse colon crossed the abdomen from left to right, and terminated in the descending colon, which traversed the right side, and was partially covered by peritoneum, and which terminated in the sigmoid flexure in the right iliac fossa. The sigmoid flexure terminated in the rectum opposite the right sacro-iliac articulation; the rectum then passed down into the pelvis in a normal direction. Vessels: The abdominal viscera were supplied with blood from the aorta, which was situated on the front of the spinal column below, and a little to its left side above, nearly in its normal position. The inferior vena cava was situated to its left side, and passed upwards in this direction to the heart. The whole of the branches of the abdominal aorta were transposed.

There was no evidence of any disease in any part of the body, and there is no doubt that this was one of the somewhat rare cases of transposition of the entire thoracic and abdominal viscera and great vessels.

Remarks.—Transposition of the internal viscera is usually considered as secondary to the primary transposed development of the alimentary canal. In this case the alteration in position of the heart, and the modified conditions of the other thoracic viscera, may have been secondary to the alteration in the relative position of the abdominal viscera. As regards the practical application of the case it is well to bear such an abnormality in mind, as if the patient had been brought to the hospital in a state of insensibility, without any history, and presenting some obscure or acute symptoms, considerable difficulty in diagnosis might have arisen. It would also have considerably complicated any surgical operation, as colotomy, that might have been thought necessary for a possible condition of the patient.

Medical Societies.

PATHOLOGICAL SOCIETY OF LONDON.

THE ordinary meeting of this Society was held on the 21st inst.; Mr. G. Pollock, President, in the chair. It will be seen that the specimens and subjects brought forward elicited in many cases much discussion from a clinical rather than a pathological point of view. Thus, two specimens of dermoid cysts of the ovary, shown by Dr. Griffiths, of Swansea, led to the subject of ovariotomy and antiseptic surgery; Dr. Moxon's specimen of thrombus in the auricle, to the character and significance of the presystolic murmur; Dr. Fagge's case of epithelioma of the bladder, to the question of perineal section. The latter specimen, however, raised an important pathological point—viz., irritation by catheterism as a cause of the disease. Lastly, a lively debate arose over the nature of a concretion, presumably from the vermiform appendix, shown by Dr. Thorowgood for Dr. Wilton, who promised to have the specimen forwarded to a committee for examination.

The following gentlemen were elected members of the Society:—E. T. Law, M.D., T. E. Maclean, M.B., J. M. Williamson, M.D., A. E. Longhurst, M.D., and E. Wyndham Cottle.

At the commencement of the proceedings, the surgical

secretary, Mr. WAGSTAFFE, read the report presented to the President by the Society's delegates (Dr. Hare and Mr. B. Carter) to the Congress in Philadelphia. After referring to the meetings of the Congress and the eloquent addresses delivered by some of the leading medical men in America, the report stated that, although there was no section specially devoted to pathology, yet in many sections various pathological questions were introduced and ably and fully discussed; among these were included the pathology of cancer and syphilis, the germ theory of disease, the histology of the brain in insanity, fibroid tumours of the uterus, pulsating tumours of the orbit, &c. At the final meeting, Dr. Hare, one of the delegates, presented an address congratulating the President upon the success of the Congress and upon its value in the advancement of medical science, and expressive of thanks for the great kindness and courtesy with which they (the delegates) were received. The report concluded with an expression of the increased admiration the delegates had gained for their American brethren, "whose zeal, intelligence, and energy are only equalled by their warmth of reception and their unbounded hospitality."—On the motion of Mr. Holmes, seconded by Dr. MOXON, it was resolved to print the report in the Transactions of the Society.

The PRESIDENT showed a man, aged forty, who was the subject of Molluscum Fibrosum, which formed an enormous pendulous mass about the nates and thighs. Mr. Pollock said that he did not propose to interfere with the growth, for it was undesirable to deal surgically with such large and diffused growths on account of the resulting large surface of cellular tissue exposed, causing too great a drain on the patient.

Dr. THOS. GRIFFITHS, of Swansea, exhibited two specimens of Dermoid Ovarian Cyst, removed successfully by abdominal section performed with antiseptic precautions and the use of the catgut ligature. One was from a fairly-nourished girl twelve years of age, in whom a tumour in the abdomen was first noticed when four years old. She suffered from pain in the abdomen at irregular intervals, and was first seen by Dr. Griffiths on October 14th of the present year. He found a movable tumour, the size of a large cricket-ball, seated midway between umbilicus and pubes. It could be pushed into either flank, into the pelvis, or epigastrium; when in the latter situation a cord-like structure could be felt continuous with it below. It was lobulated in form and elastic, and from its long duration and slow growth was thought to be of dermoid nature. On October 25th the abdomen was laid open, and the tumour found to be attached by a long pedicle to the left ovary. The pedicle was secured by catgut ligature, and returned into the peritoneal cavity. The case did well, the dressings were only disturbed three times at intervals of five days, and on November 9th the patient was convalescent. The contents of the cyst were chiefly hair, oily fluid, and fœtal remains. The second case was that of a married woman, twenty-one years of age, who presented a tumour in the abdomen which had been first noticed four years previously. There was pain in the left iliac region, and the tumour was globular in shape, movable, and reached from the pubes to midway between umbilicus and ensiform cartilage. It was removed on November 8th, and found to contain six pints of creamy fluid and matted hairs; it weighed 1 lb. 3 oz. after removal. It also had a long pedicle, connecting it with the left ovary. The patient did well, and was convalescent on November 20th. Dr. Griffiths had had in all four cases, all treated in the same way. He asked for information as to the advantages of catgut over the clamp in securing the pedicle, and whether the ovary should be removed with the growth when the former was not intimately connected with the tumour.—Mr. SPENCER WELLS did not think it necessary to remove the ovary where, as in these cases, there was a long pedicle between the cyst and the organ; but where any portion of the Fallopian tube is removed with a growth it would not be wise to leave the ovary behind, because of the possible consequences of maturation of Graafian follicles without means of escape for their contents. He recalled a case, thought to be a movable kidney, in which a tumour, afterwards ascertained to be a dermoid cyst of the right ovary, could be pushed into the right hypochondrium. He remarked that he had performed ovariotomy three hundred times before he met with a case of dermoid cyst, and then he had two examples almost at the same time; and now, out of eight hundred operations, he had had twenty examples of dermoid cyst, eight of which had occurred in the last hundred cases. Drs. Battley and Peaslee, of the United States, had recently stated that dermoid cysts should never be removed, on account of the fatality attending the operation; but out of his twenty cases Mr. Wells had lost only two.

Dr. GOODHART exhibited a specimen and drawing of Diffuse Suppurative Inflammation of the Mediastinum. The specimen was from a man fifty-seven years of age, admitted into Guy's Hospital, under the care of Dr. Wilks, on Oct. 14th, having five days previously been struck on the chest by a log of wood. There was much dyspnœa, and pain and tenderness in the left mammary region, the temperature was raised, tongue dry and furred, and urine slightly albuminous. The patient died the following day. There were old pleuritic adhesions at the base of each lung, and the left lung was further adherent posteriorly, the adhesions being infiltrated with pus; the mediastinal tissues were gelatinous and the seat of purulent infiltration; on the opposite side there was some recent pleurisy; the pericardium was inflamed. There was no old disease. The drawing was from another case, that of a baker forty-four years of age, whose illness dated from an apparent impaction of a piece of meat in the œsophagus some months before admission, and the only symptoms presented were occasional regurgitation of food as soon as swallowed, pain at the scrobiculus cordis, and dyspnœa, the latter increasing rapidly. After death, double pleurisy was found, infiltration of the mediastinum with pus, and purulent engorgement of the pulmonary lymphatics. Dr. Goodhart added that this form of diffuse mediastinal inflammation was rare, especially as a primary disease. He quoted some statistics recently obtained by Dr. Pye-Smith from the post-mortem records of Guy's Hospital for the years 1873–75, in which, out of fourteen cases of mediastinal inflammation, seven were acute and suppurative, and only one of these not due to extension from local disease. The characters of this diffuse suppuration were comparable to phlegmonous cellulitis, and it did not strictly come under the head of mediastinal "abscess." The second case illustrated pulmonary lymphangitis, which Dr. Moxon had shown frequently to depend on obstruction to the outflow of lymph from chronic disease of bronchial glands; but in this case it seemed to be due to direct extension from the inflamed mediastinum. The symptoms in these cases were urgent but not paroxysmal dyspnœa, rise of temperature, and symptoms rather of blood-poisoning than of thoracic disease.—Dr. MOXON inquired if the inflammatory material in the mediastinum were antecedent to the condition of the lung, because, if so, it would probably suffice to block the lymphatics and lead to the pulmonary changes.—Dr. GOODHART said that although the mediastinal condition probably preceded the pulmonary, yet there was no mass sufficient to cause obstruction of lymphatics.

Dr. MOXON showed a specimen of Thrombus in the Left Auricle; it was so large as evidently to have prevented contraction of the walls of the auricle, and Dr. Moxon explained that he had brought it forward in order to illustrate the fact that the auricular contraction has less to do with the production of a presystolic murmur than the passage of blood through the contracted orifice. In this case there was a continuous murmur, occurring during the period of rest, and resembling in character the "bruit du diable."—Dr. GOWERS said that the murmurs of mitral stenosis were of two kinds—one beginning immediately after the second sound, and produced by the slow flow of blood through the orifice; the other immediately preceding the first sound, and due to the auricular contraction. In a recent case both these murmurs were present, one being heard throughout the whole diastolic pause, and at times separated by an interval from the auricular systolic murmur. Both were heard at the apex of the heart, and evidently were generated at the mitral orifice.—Dr GREENFIELD considered that the murmur described by Dr. Moxon might be produced by the flow of blood over the surface of the clot in the auricle, and was not of the character of a presystolic murmur. He had seen two or three specimens of this condition, which was described by the old writers as "aneurism of the left auricle."—Dr. MOXON said that he had brought the case forward to show that a presystolic murmur existed where the auricle could not act.

Dr. HILTON FAGGE showed a specimen of Primary Contracting Scirrhus of the Liver from a man fifty-two years of age, admitted with ascites and anasarca. He was emaciated and of sallow complexion. The liver, which weighed only 36½ oz., had the naked-eye characters of cirrhosis; but here and there were one or two cheesy masses of the size of peas, which were attributed to thrombi of the portal vein, its main branches being obstructed by clot. Microscopically, however, the liver-cells, instead of being atrophied, were of very large size, and in many places evidently cancerous. Dr. Fagge had seen two similar cases, one in a man, forty-six years of age, suffering from ascites, and a nodulated liver could be felt in epigastrium. The left hepatic lobe was found to be the seat of a diffuse growth of scirrhus cancer, whilst the right lobe exhibited the characters of cirrhosis. Here also the portal vein was plugged. This liver weighed 62 oz. A third case was that of a man, seventy-one years of age, in whom the liver (which was covered by a layer of blood) also had the external appearance of cirrhosis, but presented cancerous nodules on section. In all three cases the cancer was limited to the liver; and the condition might be said to be an instance of combined cirrhosis and cancer. But he thought it analogous to contracting scirrhus of the breast, where eventually simple masses of fibrous tissue and a few fat-granules represent the original cancer; the latter, however, differing from these hepatic cases in being at first limited only to one part of the mamma, and not diffused throughout the whole organ. Whether the cancer were due to alcoholism, just as cirrhotic change is supposed to be—i.e., by the irritant action of alcohol on the hepatic tissue—was an open question. Only one out of three of his patients was a drunkard. Frerichs and Murchison each record a case of coexistence of cirrhosis and cancer, one being in an intemperate subject.—Dr. HARE said these cases showed that sometimes the cancerous liver was small in size; in one case of scirrhoencephaloid he had seen it only weighed twenty-seven ounces.

Dr. FAGGE further showed a specimen of Epithelioma of the Bladder secondary to long-standing stricture. The patient had been, thirty years ago, under the care of Mr. Cock, who performed perineal section. The fistula had never closed, and the patient had been in the habit of introducing catheters into the bladder, through the fistula. He died last year from suppurative nephritis. The bladder was contracted and hypertrophied, and on the posterior wall behind the trigone was a well-marked epitheliomatous ulcer the size of a crown piece. There was complete obliteration of the urethra for a quarter of an inch below the perineal fistula. Dr. Fagge was inclined to refer the occurrence of the cancer to the introduction of catheters. Mr. Hilton some time ago pointed out the occurrence of ecchymosis in bladders where catheters impinge. In another case, that of a man forty-eight years of age, who had suffered from stricture for twenty-seven years, but who had not been in the habit of passing catheters to any extent, there was an indurated mass of epithelioma at the fundus, and not at the base of the bladder.—Mr. NUNN asked if Dr. Fagge brought the case forward as one of cancer due to mechanical irritation?—Dr. FAGGE said that he founded his interpretation of the case on the facts. It seemed curious that there should be an epithelial ulcer (in an unusual seat for vesical cancer) just at the spot where there was probably constant irritation from the introduction of a catheter. It could hardly be a mere coincidence.—Mr. T. SMITH said that in the other case there was no catheterism, but yet epithelioma. — Dr. FAGGE explained that the two cases contrasted with one another; in the second case the epithelioma was at the fundus of the bladder.—The PRESIDENT remarked that most cases of epithelioma of the bladder he had seen had no stricture of the urethra.—Mr. NUNN confessed to surprise at hearing Dr. Fagge's explanation of the case.—Mr. GODLEE said that surely it was not assumed that passage of a catheter was always attended by injury to the bladder.—Dr. FAGGE did not mean that all cases of epithelioma were due to irritation; some were very suggestive of this—e.g., a man, who had for forty years suffered from dysphagia, was found to have a stricture of the œsophagus, above which epithelioma had sprung up.—Dr. MOXON reminded the surgeons of the commonly-stated fact of the production of cancer of the lip from irritation due to the stem of a pipe.—Mr. HOLMES, looking on the case as one of epithelial cancer secondary to the stricture, itself the source of continuous irritation, urged the division of strictures in preference to perineal section, which leaves lasting irritation behind it.—The PRESIDENT mentioned the interesting fact that for some time previous to his death the late Dr. Marshall Hall had suffered from considerable difficulty in swallowing. His death was due to epithelial cancer of the pharynx; there was no stricture below the disease.—Mr. HOWSE, in reference to the criticism of Mr. Holmes, said that the operation of perineal section was simply palliative, and in ordinary cases the stricture was relieved, and the sinus in the perineum allowed to close up; but sometimes, from unavoidable causes, a permanent fistula was left in the bladder.

Dr. THOROWGOOD read the notes of a case of Concretion from the Appendix Vermiformis, which was removed by an incision in the back. The patient was a girl, ten years of age, who, after attacks of vomiting, complained of pain in the right groin and lumbar region, followed by the formation of a deep-seated abscess in the loin, which was opened by Mr. T. Smith. It gave exit to a quantity of fœtid pus, and three days after the operation a hard rounded mass escaped from the wound, which healed in about another week. The concretion, at first thought to be phosphatic, was afterwards considered to be biliary, but only a portion of it could be examined. In reply to Dr. Williams, Dr. Thorowgood said that the report seemed to point to its biliary nature; it left but little ash in burning, an etherial solution deposited crystals, and the mass itself floated in water. And to Dr. Payne, he said that no section had been made of the concretion.—Dr. PAYNE thought that this being the case, and the exterior only being examined, the analysis would answer quite as well for fæcal matter as for gall-stone.—Dr. FAGGE said that gall-stones only floated in water after being dried.—Mr. T. SMITH did not think it was due to a seed in the appendix, and inquired if anyone had ever met with a cherry-stone impacted there. — Mr. WAGSTAFFE thought it just possible that it did not come from the vermiform appendix at all. — Dr. MURCHISON hesitated to accept the biliary nature of the concretion from the evidence afforded. It was not common to find foreign bodies of any size in the vermiform appendix, but he had seen one case in which part of a plum stone was impacted there, and another in which a mass the size of a large cherry was found to have a nucleus of lead—viz., a swan-shot.—Dr GRIFFITHS had seen a fatal case of peritonitis from a pea impacted in the appendix; Mr. THORNTON had met with a damson-stone in the appendix; and Mr. NUNN said that Cruveilhier figures a cæcum full of cherry-stones.—Dr. CUMBERBATCH, who had seen the child under Dr. Wilton's care, did not think there was any *prima facie* evidence in favour of the gall-stone hypothesis. A stone of such size must have given rise to symptoms. — Dr. HARE suggesting that the concretion should be obtained from the parents for examination, and Dr. WILTON promising to procure it, the question as to its precise nature was referred for solution to the Committee on Morbid Growths.

The Society then adjourned.

MEDICAL SOCIETY OF LONDON.

THE meeting of the 11th inst., Mr. W. Adams, President, in the chair, was both surgical and medical. After Dr. Crisp had shown preparations of Croupal Membrane, the President read an interesting communication addressed to him by Dr. John Ashhurst, of Philadelphia, and, finally, the adjourned discussion on Dr. John Brunton's cases gave rise to some practical remarks from various speakers.—Dr. CRISP, whilst his preparations were going round, made a few observations. Amongst others he said that croupal membrane was always on the surface, whilst that of diphtheria extends even into muscular tissue; this view, however, was opposed by Dr. Lawson and Dr. Semple.—The letter read by Mr. Adams from Dr. Ashhurst was to the effect that he (Dr. Ashhurst) had performed his (Mr. Adams's) operation of subcutaneous division of the neck of the thigh-bone on the left side, and Gant's operation of subcutaneous section of the femur just below the tro-

chanters on the right side, on a child aged nine years, with anchylosis of both hip-joints. Dr. Ashhurst said that the case was one of the "bad strumous kind," in which Mr. Adams did not recommend his operation, but that the result had been above his expectations, the patient being well as far as the operation was concerned, the limbs being now parallel, and of nearly the same length, and he hoped that in a few weeks the child would be able to use crutches. Mr. Gant's method was followed on the right side, as here the neck of the bone seemed to have entirely disappeared.—Mr. GANT, in speaking of his own operation, said it was indicated in old scrofulous disease, whilst Mr. Adams's was more applicable to early strumous and rheumatic cases.—Mr. MAUNDER lauded the use of the chisel in these operations; and the PRESIDENT made a few remarks about American surgeons and surgery.

The adjourned discussion was then commenced on Pelvic Hæmatoma, being the subject of Dr. John Brunton's paper, of which the following is a brief *résumé*:—After describing shortly the various kinds of hæmatoma, he said that he intended to deal only with the intraperitoneal variety, of which his cases were examples. He then gave a narrative of three cases (one of which terminated fatally), and the characteristics of each, calling attention to the sudden onset of serious symptoms. In mentioning the terminations of the cases, he remarked that the first was cured by nature causing an opening into the rectum, by which the blood was discharged. The second, which was fatal, was examined after death by Dr. Thompson, and though a very large quantity of blood was found, there were not the slightest signs of peritonitis, and no trace of a ruptured vessel could be made out. The third case, which is now well, had two or more hæmorrhages, which were successfully combated by the repeated internal administrations of spirits of turpentine. Concerning the question as to whence came the blood, he thought the sources were most likely ovarian, tubal (blood regurgitating along the Fallopian tube), a general oozing from the uterine tissues, or a rupture of enlarged or varicose vessels in the broad ligaments. With regard to treatment, he considered absolute rest, and as few examinations as possible, to be the most important points, in conjunction with maintaining the strength, recruiting the system, relieving pain, and meeting urgent symptoms when they arise; and he recommended a fair trial of the beneficial effects of turpentine. The prognosis, in his opinion, was very serious. As for diagnostic signs, he gave the severity and suddenness of the attack, whilst the absence of fever or increase of temperature eliminated the acute inflammatory affections of the uterine appendages. —Dr. Godson, Dr. Rogers, Dr. Aveling, Dr. Routh, Mr. Maunder, and Dr. Heywood Smith took part in the discussion, the speakers being mostly of opinion that these cases are not so rare as Dr. Brunton thought, Dr. Rogers and Dr. Routh laying stress on the advisability of a puncture per rectum, whilst Dr. Heywood Smith was of opinion that the temperature does rise, and that constitutional disturbance is present.

EPIDEMIOLOGICAL SOCIETY.

THE session of the Epidemiological Society was opened on the 8th inst. by an address from the President (Mr. Netten Radcliffe). He took for his subject the present position of epidemiological science, treating it, not as a question of results, but as a question of method by which results are obtained. According to Mr. Radcliffe the event which has perhaps, exercised the most important influence on the study of epidemiology in modern times was the discrimination of typhus and typhoid fevers, first made commonly known by the writings of Sir William Jenner, whose researches on the subject confirmed and extended previous investigations of Dr. A. P. Stewart and others, and were followed by the wider inquiries of Dr. Murchison. He described this event as a "revelation," for it revealed a fundamental error in the medical teaching of that day as to continued fevers. This teaching deprecated attempts to distinguish particular kinds of these fevers, and regarded them as one and the same disease originating in a like cause. He described this event also as an instauration of true method, for it proved that a just discrimination of disease was the initial step of successful research into its etiology, and, when liable to epidemic extension, into the conditions of epidemic prevalence. Starting from this position, Mr. Radcliffe briefly indicated how the method of investigation by which the discrimination of typhus and typhoid, clinically, pathologically, and etiologically, had governed all successful epidemiological work since the date of the discovery, and was the great characteristic of the epidemiology of the present day. This method, however, had not completely supplanted the older method, which treated rather of epidemic diseases in groups, including sometimes (as we now know of the continued fevers) very diverse diseases, and sought to deduce an explanation of epidemics from certain preconceived doctrines of telluric, atmospheric, and celestial agency. At least we retain the phraseology of this older method, very hurtfully to epidemiological progress, Mr. Radcliffe maintained. Thus the word *epidemic* has in medical use several distinct definitions, each inconsistent with the other, and all antagonistic to existing knowledge on the subject. For example, one definition restricts the term to certain contagious maladies; another wholly excludes contagious diseases; other definitions imply respectively a telluric, atmospheric, and cosmical origin of epidemics; and, finally, perhaps the most favoured definition assumes that the cause of an epidemic is something occult, respecting which it is vain to speculate. Against such uses of the word, and particularly against the retention of such uses in text-books of medicine which also contain the results of the researches of the past quarter of a century as to the continued fevers, Mr. Radcliffe protested. He endeavoured to show also how the current terms *epidemic constitution* and *epidemic influence* had attached to them meanings not less various and fallacious than the various uses of the word *epidemic*, and he urged that it was high time that some common agreement were come to as to the medical use of the word. He indicated, however, the difficulty of bringing about such agreement in face of the strangely loose use of the word in the Nomenclature of Diseases issued under the authority of the Royal College of Physicians. Mr. Radcliffe would have the word used technically as it is used in ordinary language—namely, in its literal sense, simply as a descriptive term. He, agreeing, in this respect, with the learned professor of epidemiology at Val de Grâce, Dr. Léon Colin, submits that the term should be used in the sense "common to or affecting a whole people or a great number in a community, prevalent, general" (Webster). Quoting Dr. Léon Colin, he said, "It is the disease which constitutes the epidemic, not the epidemic the disease. The evil always remains the same, the number of the affected being alone increased." The first element, indeed, in the successful pursuit of epidemiological research, under this view of the question, Mr. Radcliffe proceeded to say, is the study of the several diseases which are liable to become epidemic, and of the conditions upon which their greater or less prevalence depends. In one sense this may be said to be a truism, but it can hardly be regarded as such while our text-books are still defaced with usages of the word *epidemic* which (again to quote Dr. Léon Colin) "signify implicitly a common cause apparently indecomposable, to which individuals are not exposed successively, but simultaneously, ... a something isolated, impersonal, inaccessible to reason, detached from the disease, the epidemic genius [constitution, influence] ..... a creature force of the different epidemic affections, controlling, directing, extinguishing."

Mr. Radcliffe next insisted that the event which he had described as an instauration of the method of epidemiological research—namely, the discrimination of typhus and typhoid—and the consequences which have followed from it, furnish the most striking illustration of the justness of the view he had advanced—to wit, that the pursuit of epidemiology, to be successful, must be based upon the study of the individual diseases liable to become epidemic. Mr. Radcliffe here observed that he was again conscious of uttering what was, no doubt, a truism to many, but which he was unable to avoid in view of the common teaching of our text-books as to epidemics.

Mr. Radcliffe next proceeded to illustrate in detail the, as he termed it, "amazing fertility" of this method of epidemiological inquiry, from the history of the epidemic

small-pox of 1869-73. Accepting, for his argument, Dr. Léon Colin's views, founded upon a close study of the habits of small-pox, as to the local origin of this great epidemic in Brittany, and its diffusion thence, he proceeded to show in considerable detail how singularly suggestive these views were as to the direction of research into other epidemic diseases, as well current as foreign. This and the concluding portion of Mr. Radcliffe's address (the latter referring to the work of the laboratory, physiological and chemical, in epidemiological investigation) do not admit of being abstracted, and they must be read in the Transactions of the Society.

ANTI-VACCINATION CASES.

ONLY one thing is wanting to make the opponents of vaccination look as foolish as they really are. This one thing is to give them rope enough—to encourage rather than oppose them in the investigation of cases of alleged harm from vaccination. By doing this the anti-vaccinationists will be made parties to establishing the harmlessness and beneficence of vaccination in a way they do not at present bargain for. A little anti-vaccination agitation has been attempted in Sunderland. Charges of vaccinating in an improper manner were brought against one or more of the public vaccinators. The charges were referred for investigation to the vaccination committee of the guardians of Sunderland, who went carefully into the matter, with the help of six doctors. The children concerned were produced, and the committee reported that "the accuser had failed to prove the accuracy of any one of his statements, and that the public vaccinators had clearly shown that they had used the utmost care in the performance of their duty." We might have been satisfied with this, and left the anti-vaccinationists to feel the discredit which they had brought on themselves. But, in accordance with our advice last week, we have sought to get at the facts, and we have been kindly supplied by Dr. Blumer with his report to the guardians of the cases upon which the friends of small-pox have dared to condemn him as a public vaccinator. This report is a most instructive document, and should really be published *in extenso* by the guardians for the information of the people. In one case a flea-bite on the eyelid was mistaken by an anti-vaccinator for a result of vaccination. In another case the death of a child from diarrhœa was put down to a previous vaccination, which had done perfectly well. Nine other children, vaccinated from the same source as this, did perfectly well. In another case a child died of syphilis after vaccination! This looks very shocking until Dr. Blumer shows that eight children in the same family had all died within two months of the same disease, that this child was born with it, that he told the mother it would die like the rest, and that he was careful not to vaccinate from it. Surely even the opponents of vaccination are not so stupid as to think that those who approve of it believe it capable of protecting children from death by summer diarrhœa, or by the syphilis conveyed to them from their parents. One child, named Thompson, died of erysipelas after being vaccinated. But what are the facts as to the purity of the lymph? These: that the child from whom the lymph was taken was, and is, in perfect health; that the parents had been known to Dr. Blumer for twenty years to be very healthy; that five other children, vaccinated at the same time and with the same lymph as the child Thompson, passed most favourably through the disease; and that the vaccination process on the eighth day in the child Thompson itself was so satisfactory that two children were vaccinated from it who have been quite well since. There is a force in these details which cannot be resisted by people of ordinary common sense. Dr. Blumer says that the child under vaccination had been exposed to night air, and very probably got the vesicles rubbed. We know that the vesicles are very irritable in some cases. Whatever the cause of the erysipelas, it was not in the matter, which was tested in every way, but in the child itself or its surroundings. Fortunately—thanks to Dr. Blumer's knowledge of the families of his district, and to the completeness of the public vaccination system—all this evidence was *in retentis*, ready to be produced. As it happens, the men who can see bad vaccination in flea-bites have by their agitation called it forth to their own discomfiture. Possibly this child might not have incurred erysipelas if it had not been vaccinated. But is a community to go unprotected from small-pox because one child *may* possibly have its vaccinated arm become the seat of erysipelas? It is only necessary to reply that it would almost certainly ere long get small-pox and give it to others, of whom fifty per cent. would die, the survivors being all disfigured, and some of them afflicted with boils, ulcers, blindness, &c. We leave these facts to the consideration of the people of Sunderland, and can only hope that in other districts public vaccinators will be able to give such a castigation to anti-vaccinationists as they receive in this report of Dr. Blumer's.

TREATMENT OF ACUTE RHEUMATISM.

To the Editor of THE LANCET.

SIR,—It would be a great pity if the mode of treatment of acute rheumatism by the various preparations of willow-bark, which in a certain set of cases has been most successful, should have undeserved discredit thrown on it, and this I think would be the result should Dr. Tuckwell's report in THE LANCET of last week be allowed to pass without notice. On comparing the symptoms which he assigns to the poisonous action of salicylic acid, one cannot fail to be struck with the resemblance they bear to those which have been recorded in cases of poisoning by carbolic acid. That which first suggested this idea to me was the character of the urine, which was described as being of an olive-green colour, the exact words usually applied to its condition in carbolic acid poisoning; and the other symptoms are quite as characteristic, with the exception of the pulse, which is generally stated to be frequent in carbolic acid poisoning, whereas in Dr. Tuckwell's cases it was "slow and labouring." Moreover, carbolic acid is said to be contained in the cheaper forms of salicylic acid. In the future, therefore, I think it would be better to use salicin in spite of its greater price, unless one could be certain of the purity of the salicylic acid. The cases of acute rheumatism I have had under my care in the Westminster Hospital, in which this treatment has been adopted, have been sufficient to convince me of its great value. The next question is, What are the cases most suitable for this remedy?—as I am afraid that we cannot look upon salicin and its congeners as universally applicable in cases of acute rheumatism.

I am, Sir, yours obediently,

F. DE HAVILLAND HALL, M.D.

Queen Anne-street, Nov. 13th, 1876.

To the Editor of THE LANCET.

SIR,—Amid all the advocates for the treatment of rheumatic fever by salicin and salicylic acid, I should like to express a hope that the old treatment by bicarbonate of potash will not be suffered to fall into disuse, more especially as the treatment by salicin does not appear to be always devoid of danger.

During last winter I had under my care nearly a dozen cases of rheumatic *fever*, all of which were treated by bicarbonate of potash, and recovered without any injury to the heart. Two of these cases certainly did as well and were *cured* as rapidly by this old treatment as any that have been recorded of the new. One case, a man aged forty, a collier, was taken ill with acute rheumatism, and came under treatment the same day. He took the bicarbonate in two-scruple doses, and was quite free from pain the following day, and at work at the end of the week.

I think many men in the country could give instances of similar quick recoveries; and my only object in asking a space to insert facts so well known is that so many appear to be giving a drug which is dearer (a weighty item in large practices) and apparently not always so safe as the old-fashioned, but equally efficient, bicarbonate of potash.

I am, Sir, yours truly,

Huddersfield, Nov. 14th, 1876. B. JONES, M.R.C.S.

THE LANCET.

LONDON: SATURDAY, NOVEMBER 25, 1876.

TYPES OF PROFESSIONAL CHARACTER.

PROFESSIONAL character is something altogether apart from the personal qualities of a professional man. Men who have to play a public, or quasi-public, part in society acquire mannerisms, habits of action and conduct, even methods of thought—it may almost be said principles—foreign to their natures.

This consideration would, as regards points of professional character, which are not in themselves attractive or admirable, be exceedingly comforting but for the reflection that no man can sustain a particular part continuously for a lengthened period—more especially one which is not, as it were, put on and taken off like an article of dress, but requires the constant exercise of a direct personal intelligence—without being himself affected by the character he assumes, and having his own nature, to some extent, progressively assimilated. The professional character is, in fact, superimposed upon the personal, but its conformation is in a measure determined by the nature on which it lies; and, by weight and friction, it moulds the latter. The two react and conform mutually, until in process of time the man as a whole comes to be neither himself nor the professional being the world sees and criticises. He is morally, intellectually, and sometimes physically, a resultant of two distinct sets of forces starting from different points, perhaps clashing roughly at their juncture, and striking out a new quality which has little or nothing in common with either purely personal or exclusively professional characteristics. It is only just and fair to bear these considerations in mind when attempting to form an estimate, however cursory, of professional character.

There are certain types of the professional character to which its individual manifestations may be more or less readily referred. For example, there is the Demonstrative practitioner, the representative of an idea which finds its development in every walk of the profession, and it is difficult to say in which it predominates or excels. A critic once remarked of an essay from the pen of an apt alliterative writer that its sole apparent purpose was the glorification of the letter "p." The principal object in life of the demonstrative physician or surgeon would seem to be the conversion of society—if possible of mankind—to the belief that he is profoundly learned in medical science, that he is an expert in practice, and that his acquaintance with all known sources of information, and experience in every line of research, are backed by a faculty of discovery, a dextrous power of diagnosis, a ready wit and resource in therapy, of which no judicious patient should fail to avail himself, and no practitioner, unless blind to his client's interest, would feel justified in neglecting. The *rôle* is a high one, but it does not necessarily imply the possession, or call for the exercise, of great parts. Above a certain level, the social atmosphere is considerably rarefied, and the act of self-inflation is proportionally easy. The qualifications for success are a glib faculty of speech, an easy bearing, a good memory—particularly for names and faces,—and a fair share of wit. It is not requisite to burden the mind with a large and ponderous stock of information. A well-assorted and varied selection of facts, daintily packed in pretty platitudes—as much like proverbs as possible,—a few rather recent and slightly *outré* or paradoxical propositions, and one or two clever aphorisms bearing for or against popular prejudices—it really matters very little which or what—will supply all the baggage with which the professional stilt-walker need burden himself. A good degree will be an advantage, and if a studious demeanour can be assumed the general effect will be more impressive. Nor is there any great danger in the part. It is astonishing how little the denizens of this superior region are affected by the ills and inconveniences to which less elevated beings and characters are exposed. The cruel wind of criticism rarely stirs the zephyrs of the higher air. The clouds that lower over the heads of men in the inferior strata of the social atmosphere lie beneath these dwellers on Olympus. The murmur of the crowd below disturbs them not. Life flows on smoothly, easily, over the heads of the turbulent multitude. When they descend, they condescend. The opinion of the highest, the most sublime specimens of this type is a revelation. No wonder it is generally given as the oracle of old gave out its utterances, shrouded in fully as much mystery, and not less ambiguous in point of actual and practical significance. There is something almost profane in the thought that the deliverances of so high an authority can be controlled by conventional rules. Your consultant of this typical class is above considerations of time, place, and company. He is—*himself*. There the conception begins and ends.

The antithesis of this last type of practitioner is the Scientific. If he has gained the same level, it must have been by climbing, not by a process of professional levitation. The rarefied atmosphere which surrounds him proves rather embarrassing than exhilarating, and when he comes down to the level of his brethren, it is with the air of a man meeting his kith and kin on homely ground. There is no affectation of superiority, no lofty airs disturb the harmony; the rules of common professional life are neither despised nor neglected; there is no tricky mannerism, no insistence upon particular modes of dealing with subjects, because there is no lack of knowledge or forgetfulness to gloss over and conceal. Real ability, evinced by solid attainments, like good wine, needs no bush. The man has been, and still is, a worker in the domains of science. His judgment is ripe, his information trustworthy, his opinions have shape and consistency; they are no mere wind-bags of fancy cut to a professional pattern, and labeled to suit convenience, but real earnest convictions. As such they are valued, and the man of science, whatever his social status, is honoured with the confidence, and commands the respect, of his profession. This will always be the highest type of the professional character, let its personal developments be what they may.

There is a third, and by no means admired type of the genus professional. He is popular and pleasant, but nobody feels quite at home with him. It requires so much acuteness and tact to avoid being captivated by

the agreeable loquacity, and misled by the specious, though superficial, sophistry of which he is master. There is an unctuous pleasantry, or it may be a sympathetic frankness, about his manner of dealing with persons and objects, which beguiles the weak and impressible, while it provokes the more independent. His opinions are blown about as easily and noiselessly as the pointers of a well-oiled weathercock, and in coming round to your way of thinking or twisting you round to his own, he glides so smoothly, and so carefully preserves moral and intellectual sensibilities from the slightest jar, that few are safe in his company, and none except the careless or benighted really at ease. This type of the professional character differs from the first indicated in that it is not always demonstrative, at least of its own excellences. Very successful specimens of the class have been notable chiefly for their almost deprecatory air of teachableness, meanwhile twirling the dupe of their dexterity, swiftly, surely, and unconsciously, round their fingers. Characteristic of the life and conduct of this type of practitioner is the success with which he wriggles out of difficulties, and sometimes of obligations, honour and honesty combine to press upon him.

Then come types of the professional character in which the personal element is prominent. Real modesty, like true humility, is a virtue; the counterfeit, mock modesty, is a vice. The man who goes about tenderly bewailing his own incompetence has generally ample cause for his lamentation. He is incompetent, and the fact comes out strongly in the circumstance that he lacks the wit to conceal his ignorance. There is, however, a variety of the modest character which, without being entitled to the praise of virtue, is not so vicious as this parade of stupidity. It answers to the quality of bashfulness in ordinary character—an uncomfortable, but rather pitiable than blameable weakness. Bashful men are generally awkward, and the bashfully modest practitioner not unfrequently commits indiscretions, and becomes himself involved, or entangles others, in situations the most embarrassing. A lack of moral courage is the fruitful cause of manifold mistakes, and the source of much social and personal misery. The want of professional self-confidence is equally calamitous. When a man cannot, or will not, trust himself, those around begin to suspect there is something consciously wrong or defective in his moral constitution, or the bases of his character. Of all forms of bashfulness, that which disables a man from speaking the truth boldly, or taking the right course of action at the precise moment of need, in the face of all obstacles, and in spite of every adverse influence, personal or general, is the most disastrous. It is, however, far from being an uncommon form, and to its baneful consequence many untoward professional disasters and discords may be traced. The truly modest man is an estimable character, more especially when the virtue is not so intense as to prove enervating. Real knowledge has a natural tendency to enforce a sentiment of reserve and diffidence upon the cultivated mind. No one who clearly perceives the immensity of scientific truth, and, however dimly, scans the unexplored provinces beyond, can fail to be modest in the consciousness of his own insufficiency. Modesty, the fruit of an intelligent appreciation of the greatness of truth, and the relative littleness of the mere truthseeker, is the virtue which all good and wise observers must respect, and for which they will feel a sincere admiration.

Another type of professional character is notable for the impetuous, but jerky, enthusiasm of the man who exhibits it. He is perpetually in pursuit of an idea; his state of mind is best described as one of ceaseless expectancy. He is treading on the threshold of something great and beautiful. Presently he will succeed. His breathless life is spent in "dashing off" things, flying here and there, "starting afresh," "striking out a new line," making a discovery, redressing a grievance, or conferring some stupendous obligation on the profession, of which it is sad to reflect little or nothing is felt or appreciated. Such men are not unfrequently brilliant, but when the bloom falls off the wing it looks wofully limp and draggled. The character is occasionally, by courtesy, called erratic. Wandering stars are not, unhappily, destined for high distinction.

Such are a few typical specimens of the professional character. They may be combined or diluted. Out of their compounds and modifications are fashioned the habits and peculiarities by which individual men are distinguished. There is a practical service to be done by illustrating and studying these leading lines of development. The recognition of such types as exist may teach us how to amend the old stock, and, perhaps, originate new and better varieties.

IT appears probable that chemistry will at last receive recognition as a profession as well as a science. For some time past consulting chemists have complained of the uncertain position they at present occupy. Their work is varied, difficult, and of great public importance. Commercial operations, involving large sums of money, are effected every day on the faith of their certificates, the protection of the public from adulteration is committed to their skill, the quality of the water we drink, of the air we breathe, and of the food and drugs we consume, can only be guaranteed by them. They are appealed to by the householder, the manufacturer, the merchant, the physician, the statesman, and the lawyer; and, in particular, it often happens that the detection of a murder or the protection of a person unjustly accused of crime hinges upon the skill of the consulting chemist. And yet at the present time the consulting chemist has no status, no compulsory education is forced upon him, no experience is required of him, and no examination tests his skill. He may or he may not have received a training adequate to the grave duties which he has to discharge; he may be a learned and skilful man, or he may be a quack, whose only qualification for practice is the brass-plate which he places outside his door, or the scarcely less brazen foreign diploma which he has purchased. Between the quack and the qualified man the public has no certain means of distinguishing, and it is high time that some such means should be provided.

From another point of view, also, the formation of some guild of professional chemists is seen to be desirable. Consulting chemists, as a rule, are generally admitted to be upright and honourable members of society; but there have never been wanting men who, with knowledge and skill, have been tempted by money to do things both

unfair and unprofessional. We do not allude to the beggarly scale of fees which some unfortunate chemists have been induced to accept, for that perhaps has not been a matter of choice to them; but to the notorious abuses engendered by the "high" and "low" analysts, and to the now too common prostitution of chemical analysis in the cause of trade puffing. It is well known that the merchant who sells by analysis knows which analyst will appraise his goods at the highest price, and would go to a different analyst if he were buying. For the other—the puffing evil—we need only refer to any hoarding in the country, where the names of men distinguished for scientific attainments are only too frequently to be met with, side by side with those of notorious professional empirics. For such evils an institute armed with sufficient powers could surely find remedies, if not immediately, at least ultimately.

The first active step towards the foundation of such an institute was made by Dr. WRIGHT, of St. Mary's Hospital, in some well-considered letters which appeared in the *Chemical News*. The matter was at once taken up warmly. A meeting under the presidency of Professor ABEL, the President of the Chemical Society, was called, and a provisional Committee appointed. This Committee very properly placed itself in communication with the Chemical Society, through its Council, with the view of ascertaining whether that large and influential body, which includes among its fellows almost all the chemists of the country, would be able and willing to provide the necessary organisation. It is known that the Council of the Chemical Society gave the most careful consideration to the whole subject, and would have rejoiced if it had been possible to devise a satisfactory scheme. But the powers of the Chemical Society are of course limited by their charter, and so many difficulties arose that it was ultimately decided on all sides that a new association must be formed, distinct in its object from, but it is believed in ardent sympathy with, the Chemical Society. Accordingly, at the last meeting of the supporters of the new scheme, with Prof. ABEL once more for chairman, an independent Institute was formed, and a Committee of fifty-one well-known chemists was there and then appointed for the purpose of organisation. This Committee holds its first meeting to-day.

It is, of course, impossible to anticipate what course of action the Organisation Committee will adopt. They will, doubtless, receive and consider the claims of all those who desire to be enrolled in the Institute, forming general rules for their own guidance in the difficult work of selection. For those who have received a sound professional training for a sufficient period of time, and who bear unsullied professional characters, the admission will no doubt be easy. In fact, it appears obvious that at first a somewhat wide margin must be allowed, and many persons admitted on claims which in future may well be deemed insufficient. For if a man has been in reputable practice as a consulting chemist for some time, it would be hardly fair now to inquire how he gained his knowledge. In future, no doubt, the conditions of membership will be made more stringent, and those who cannot produce very strong evidence of competency may be required to pass a rigorous examination. This last condition may even now be necessary in certain cases.

As soon as the work of organising the new Institute is commenced difficulties of a grave, though not, we believe, of an insuperable, kind will present themselves. Some of these may be mentioned as examples, although the time for dealing with them is not yet ripe. Will a general knowledge of chemistry be held as an essential condition, or will minute acquaintance with one province, such as practical pharmacy, food analysis, or assaying, be held sufficient? Will evidence of mere skill and experience suffice, or will "unprofessional conduct"—itself somewhat hard to define, and still harder to prove—be held as a bar to the entrance of even the highest skill? And, finally, what provision can be made for the removal of members whose professional conduct is deemed reprehensible? What measure shall be applied to the offences, and what line can be drawn? The removal of a member, even the rejection of a candidate, will be a most serious matter, involving possibly ruin to the individual, for the membership will soon be a necessity to all who wish to practise as consulting chemists; and yet, unless rejection and removal are rigidly enforced in the proper cases, the membership will not provide the guarantee that is required. We presume the Institute will have to contemplate the possibility of actions at law.

It will readily be believed that in suggesting these points for consideration we have no desire to hamper the work of the Committee, nor any serious doubt of the success of the Institute. As we hope for, so we believe in, its ultimate triumph. It will be a gain to civilisation, and will render progress in all branches of human industry and research more sure.

THE current number of the *British and Foreign Medico-Chirurgical Review* contains an article of much more than ordinary interest and merit on the vaso-motor nervous system. It not only describes the rapid rise of this branch of nerve-physiology, but also deals very fully with its present position, and points out most clearly how far the ordinarily-received theory is from being a complete grasp of the multiple phenomena, which we are now bound to consider. So long back as 1727, POURFOUR DU PETIT clearly described the contraction of the pupil and the recession of the eyeball after section of the cervical sympathetic, and attributed them to their true cause, but his observations were unheeded and barren in result until CLAUDE BERNARD repeated them in 1851, and pointed out the congestion and increase in temperature which were also always present. As HENLE had demonstrated the unstriped muscular fibre in the middle arterial coat, and, with STILLING, had surmised that this was supplied with nerves like ordinary muscle elsewhere, the ground was cleared for BROWN-SÉQUARD to determine that the phenomena which had been observed were immediately dependent on paralysis of such nerves, and to follow this up by showing that excitation of the distal extremity of the cut nerve-trunk produces diametrically opposed effects. Section of nerves in other parts of the body, which also contained sympathetic filaments, was always found to give rise to similar results, and the existence of a vaso-motor system was thus established. But the next step showed that similar

experiments on the branches connecting the spinal cord with the sympathetic system induced the same results, and so physiologists were led to the hypothesis that the primary source of these vascular nerves was in the cerebro-spinal axis, whence they passed through the ganglia and branches of the sympathetic to their destination. OWSJANNIKOW next showed that this deep origin was placed in the medulla oblongata. It consists in the rabbit of two bilaterally symmetrical portions situated "between a point 1 mm. behind the corpora quadrigemina and another point from 4 to 5 mm. in front of the apex of the calamus scriptorius." Any damage to this centre causes relaxation of the small arteries throughout the body generally, and a great fall of blood-pressure, whilst electric excitation is followed by the reverse effects. LUDWIG and CYON now proved that their "depressor" nerve affected the blood-pressure, for irritation of its proximal end after section produced a *fall* of blood-pressure. Stimulation of the cerebral end of many sensory and mixed nerves was already well known to cause an *increase* of the arterial tone and the blood-pressure. These two kinds of afferent fibres were supposed to act on the vaso-motor centre, and increase or diminish its function. This clearly states the modern theory as most usually accepted, and as innumerable hypotheses concerning the nature of obscure and so-called functional diseases and the action of remedies have been built upon it, it is important to point out that this is quite inadequate to explain some other phenomena which have been observed, and that therefore it can only be considered as a partial expression of the truth. BERNARD, whilst investigating the secreting function of the submaxillary glands, found that irritation of the distal end of a cut chorda tympani nerve always dilated the bloodvessels of the tongue and increased the secretion of saliva, and ECKHARD demonstrated the presence of vaso-dilator nerves starting from the sacral plexus of the dog and going to the penis, to which he gave the name of *nervi erigentes*, as stimulation of them produced turgescence and erection of that organ. Claims for other vaso-dilator nerves have also been put forward, and we must at any rate allow that dilatation of bloodvessels is not necessarily a paralytic phenomenon of the vaso-motor system. Must we admit, then, that there is a vaso-dilator system as widely distributed as the vaso-motor or constrictor system? GOLTZ would explain all dilatation of bloodvessels as due to irritation of vaso-dilator fibres at the time of section, and appeals to the temporary nature of the dilatation as a proof of this, for the arterial tonus is always speedily re-established. In addition, he teaches that the calibre of the bloodvessels is regulated by local centres, which are in subordinate connexion with the sympathetic and cerebro-spinal centres. The experiments on which he bases his inferences have been verified recently, but his explanation of local centres was forestalled by LISTER in 1858, although it received very little attention at that time. These perivascular ganglia give off a branch (vaso-constrictor) to the muscular coat, and receive another branch (vaso-dilator, or, better, vaso-inhibitory) from the skin or tissues, whilst we must assume a similar set of double fibres connecting each centre with one higher in the nervous scale. That these higher centres are very numerous and are placed in harmonious order throughout the nervous system, is extremely probable. VULPIAN and BERNARD have both shown the functional independence of the reflex vaso-motor phenomena of the sympathetic centres in the case of the submaxillary ganglion, and GOLTZ has demonstrated that certain centrifugal vaso-dilator fibres have an independent origin from a centre in the lower part of the spinal cord, and other evidence supports the view that there are a series of similar centres at intervals along the whole spinal cord. That there is a most important vaso-motor centre (in the medulla oblongata) cannot be doubted, although it be deprived of its pre-eminence as the sole regulator of vascular contraction and dilatation. Rising a step still higher, we find that numerous recent observers have shown that arterial relaxation, diminution of blood-pressure, and increase of temperature, follow destruction of certain limited portions of the cortex of the cerebrum, and that electrical stimulation of these areas by induced currents produces a transient fall of temperature. We are, therefore, driven to a much more complex hypothesis than that which is generally adopted. Local vaso-motor centres are probably distributed universally in immediate juxtaposition with the bloodvessels, and each receives not only a peripheral set of nerve-fibres, which must contain both vaso-constrictor and vaso-inhibitory or dilator filaments, but also a central or commissural set from a nerve-centre higher in the scale. This is again connected with a centre higher up, and so on throughout the entire nervous system. Impulses may thus be communicated to any individual centre, either peripherally or centrally, but the ultimate contraction or relaxation of the bloodvessel depends on the perivascular ganglia. It is obvious that if such an elaborate hypothesis be necessary merely to hold together the well-ascertained results of modern experimental research in this direction, and that even this may not do so for long, more caution than is usually displayed must be taken before we invoke its aid in the explanation of our daily clinical and pathological observations and in describing the *modus operandi* of our therapeutic agents.

Annotations.

"Ne quid nimis."

MORTALITY OF HOSPITAL SMALL-POX CASES IN THE EIGHTEENTH AND NINETEENTH CENTURIES.

ANTI-VACCINATORS have recently asserted that small-pox is as fatal a disease now as it was in pre-vaccination times, and have used this assertion as an argument against the utility of vaccination. If it be true that the proportion of deaths to cases of small-pox is as high in the present day, when 75 per cent. of the cases are certified to be vaccinated, as previously to the discovery of the efficacy of vaccination, such a fact should be investigated and explained. So long, however, as the proportional fatality among unvaccinated cases continues from four to six times as great as it is among vaccinated cases, we fail to see how even an increased rate of mortality among the total hospital cases of small-pox could be logically used as an argument against vaccination. Dr. Jurin, an advocate of small-pox inoculation, recorded 17,151 cases of small-pox in 1723, among which the mortality was 17 per cent. Duvillard records 24 594 cases occurring in various parts of Europe between 1700 and 1763, among

which the mortality was 19 per cent. In the London Small-pox Hospital the mortality among 6456 cases treated in 1746-63 was equal to 25 per cent. After this lapse of time the reliability of these figures would be difficult to establish satisfactorily, but it is evident that all these reported cases must have been unvaccinated. There can be no doubt as to the accuracy of the mortality among the 14,808 small-pox cases treated in the Metropolitan Asylums District small-pox hospitals during the epidemic in London in 1871–72, which was 19 per cent. Now it is equally certain that 75 per cent. of the cases then under treatment were vaccinated cases, and that the mortality was only 10 per cent. among the vaccinated, whereas it was 45 per cent. among the unvaccinated. It appears, therefore, that the recent proportion of mortality among unvaccinated small-pox cases is 45 per cent.; whereas in the last century the proportion, if the before-mentioned figures are trustworthy, did not average 20 per cent. These figures seem to prove that modern small-pox is a more fatal type of the disease than was the small-pox of the eighteenth century; but the figures can have no possible bearing upon the value of vaccination, as they exclusively relate to unvaccinated persons.

The Registrar-General, in his last weekly return, publishes some statistics showing the mortality among the recent hospital cases of small-pox in London. Since the beginning of the year, 687 completed cases of small-pox have been recorded in the two Metropolitan Asylum Small-pox Hospitals at Homerton and Stockwell, of which 522 resulted in recovery and 165 in death. Thus the mortality among these completed cases was equal to 24 per cent., a proportion exceeding by 5 per cent. the rate which prevailed in the Asylum District Hospitals during the small-pox epidemic in London in 1871–72. The proportion of vaccinated among the cases treated this year has been 75 per cent., corresponding with the average proportion during the last epidemic, and yet the percentage of fatal cases has been almost as high as among the 6456 cases treated in the London Small-pox Hospital in 1746–63, before-mentioned, all of which were unvaccinated. Of the 687 completed hospital cases in London since the beginning of this year, 512 were vaccinated, and showed a mortality of 13 per cent., whereas among the 175 unvaccinated cases the proportional mortality was 57 per cent. Thus the protective influence of vaccination continues conspicuous, although the mortality among the unvaccinated shows so remarkable an increase. It is well known that the mortality among hospital small-pox cases exceeds that which prevails among cases treated at home; this is in great measure due to the fact that the worst cases are taken to hospitals, while the mild ones are not removed. This, however, does not explain why the mortality of hospital cases in 1876 is higher than it was in 1871–72, and very nearly as high as it was reported to be in 1746–63, before vaccination was heard of. This apparent increase in the proportional fatality of small-pox calls for further investigation.

UPPINGHAM SCHOOL.

WE regret to learn that scarlet fever has broken out amongst the Uppingham boys. Last winter, owing to repeated outbreaks of enteric fever at some of the "houses," it was determined to remove the school for a time to commodious quarters at a village on the seacoast of Cardiganshire. Such an occurrence is extremely unfortunate for the school, and, coming so soon after the other disaster, must affect it injuriously. The Uppingham people, however, must congratulate themselves that the outbreak occurred before the contemplated return of the boys to the town was carried out, so that the sanitary authorities will not have this catastrophe to answer for. We should hope these repeated misfortunes will convince the head master, Dr. Thring, that the most perfect sanitary arrangements, or even the selection of "the healthiest spot in the whole kingdom," is insufficient to prevent the ingress of zymotic disease, unless there is also a system of medical supervision, and such vigilance exercised that the very first manifestations of disease are at once detected and promptly dealt with. Where such supervision is neglected, or imperfectly performed, it is quite possible for a case of scarlet fever to remain undetected for a day or so, whilst the boy, mingling freely with school-fellows, is infecting those susceptible to the disease. No school has suffered more severely from scarlet fever than Marlborough did a few years back, and at one time it seemed hopeless to eradicate it. Dr. Bristowe, at the request of the governing body, visited the school, and drew up a series of recommendations, which were adopted and ably carried out by Dr. Fergus, who is the sole medical attendant of the school, and devotes his whole time and attention to its duties. We do not hesitate to say that at no school in the country is the system of medical supervision more perfectly carried out than it is at Marlborough, and the result is a comparative immunity from zymotic disease, and an entire freedom of anything approaching an epidemic. It is to be hoped the Uppingham authorities will learn wisdom from their misfortunes, and at length be induced to adopt some degree of medical surveillance over the boys, especially during the first week or so after their return from home.

DUTY-FREE IMPORTATIONS.

THE guardians of the South Dublin Union are just now very much exercised because certain English towns have transmitted cases of small-pox to their city, in the persons of paupers. It is stated that ten cases were thus received in less than a fortnight from Liverpool, Manchester, and Salford, in all of which places small-pox is just now epidemic. We are somewhat curious to know the following particulars with reference to these cases:—(1) In what stage of the disease were these paupers started on their journey? (2) In what stage of the disease did they arrive in Dublin? (3) How were they accommodated on the passage? (4) What are the results to the crews of the ships in which they were conveyed, and to the passengers who came after, and who of course occupied the berths of these people? (5) Have the Dublin authorities instructed their port medical officer (if such an official exists) to examine arrivals and take proper precautions? It is clear that the vessels which conveyed these paupers ought to be classed as infected until they have been properly fumigated and cleansed; and it is equally clear that under the powers given by the Public Health Act of 1875, those clauses relating to port sanitary authorities ought to be much more extensively utilised. A great fuss is made if a single case of the disease arrives in the Thames from Antwerp or one of the continental ports, but we do not scruple to foul our own nests by sending cases from one part of the kingdom to the other, and so infecting at the same time our coasting passenger-ships. Three years ago, when cholera was expected, the Dublin Sanitary Authority furnished themselves with a very convenient, though small, floating hospital, at a cost of about £2000. This hospital, which costs about £200 annually to keep up, has since 1873 received but one patient. Surely it is competent for the Authority to utilise it by lodging therein any suspected case of small-pox brought into their district by water, and thus completely isolating it from the city until a diagnosis was made. Anyhow, in case of paupers there could, we think, be no practical difficulty in the adoption of such a course.

THE LORD CHIEF JUSTICE ON VACCINATION.

SIR ALEXANDER COCKBURN has asserted and maintained the honour and dignity of English justice in a manner at once exemplary and in the highest sense patriotic. Unsullied purity, fearless independence, and that form of philanthropy which promotes virtue and happiness by vindicating truth have been the characteristics of his great career. It is a gain to any question that his cultivated acumen is brought to bear upon it. The clearness of his perception throws new light on the topic he reviews; the precision and strength of his judgment imbue it with fresh life. It is with sincere satisfaction, therefore, we receive the dictum of the Lord Chief Justice on the pressing subject of vaccination. There is nothing more to be said with respect to the position assumed by the Keighley Guardians. In after years probably these men will keenly appreciate the lawless audacity and absurdity of the course they have pursued. In any event the common sense of "mankind" will not fail to form an adequate opinion on their misconduct—that is to say, the exceedingly small section of intelligent persons who deem it worth while to waste a thought on this ridiculous episode, not more remarkable, as we pointed out weeks ago, for its wrong-headedness than for the astounding ignorance of the law the exhibition involved. We turn to the judgment of the Lord Chief Justice, who, in a few weighty words, has sketched the whole situation.

"It may be that here and there some mischief may have resulted from the practice of vaccination to which these persons are so strenuously opposed. But when we bear in mind that which historically we know—perhaps they do not—that before vaccination was instituted the small-pox was one of the greatest plagues and curses that ever affected humanity; that it swept away its victims by thousands and tens of thousands, and was a source of fear, and dread, and terror to the whole community, of both sexes and all ages, and that that prodigious plague has been, practically speaking, put an end to by this mode of anticipating it and dealing with it, this must influence the minds of all who reflect upon it, as it has influenced the Legislature and the more enlightened and educated members of the community."

This exposition of the medico-social aspect of vaccination as a successful scientific measure to arrest the progress of a hideous disease is not less clear and conclusive than the plain ruling of law. We can only hope the opinion of this highly respected authority will do more to put down the wild tumult of an unscrupulous agitation than the reasoning already employed.

INVERSION OF THE UTERUS.

BY a strange coincidence it happened that in one afternoon lately—on the 16th instant,—at St. Bartholomew's Hospital, two cases of inversion of the uterus had to be treated by Dr. Greenhalgh, three or four years having elapsed since a case of the kind had been in the hospital. In both of these cases inversion happened after delivery. In one it had existed for two years and a half, in the other for eight or nine months. The full particulars and the results of treatment will doubtless be published in due time. Meanwhile we may say that in the case of longer duration, Dr. Greenhalgh proceeded, on the day mentioned, to amputate the uterus with the écraseur. Various attempts at reduction had been made previously by Dr. Godson, without success, but not without some indication that the patient would not bear further attempts of the sort. The chief feature of the operation was the deliberation and patience with which the écraseur was used, half a minute's interval being allowed between each tightening of the chain. There was no bleeding after the operation, and when we saw the patient at the end of the seventh day she was very comfortable, and had not had one bad symptom. The temperature had not risen higher than 100°, and this only for a few hours.

In the case of shorter duration, Dr. Greenhalgh felt very hopeful of being able to succeed with the taxis, the patient being of course under anæsthesia; but the resistance proved too much for him, though he continued a well-sustained taxis as long as he could—for about twenty minutes,—and then asked Dr. Godson to continue it, who soon came to the conclusion that it could not succeed. The operation was followed by a temperature of 100° for a few days. It is certainly a serious operation to amputate the uterus in women like these, in the very middle of the menstruating period of their lives, even in cases of recovery as the present promises to be. It will be very gratifying if Dr. Greenhalgh, by some of the recognised varieties of conservative procedure, should succeed in the remaining case in preserving the uterus intact, and replacing it. Meantime he is to be congratulated on the course of the case in which he felt it necessary to have recourse to amputation.

THE HEALTH OF BRIGHTON.

THE health of Brighton in the season has far more than local interest and importance. It is therefore very satisfactory to find that during the week ending the 18th inst. the annual death-rate among the 100,632 persons estimated to be living within that borough was as low as 17·6 per 1000, and 10·3 per 1000 below the average rate which prevailed in the twenty largest English towns. Not a single death during the week was referred to any of the seven principal zymotic diseases, although the rate from these diseases in the twenty towns averaged 3 per 1000. The recent short cold period, which caused so considerable an increase in the rate of mortality in London and in most of the other large towns, appears to have been comparatively harmless in Brighton. During the seven weeks ending the 18th inst. the annual death-rate in Brighton averaged only 18 per 1000, against 21·9 in the twenty towns; this signifies that in an equal number of persons living only 82 have died in Brighton to each 100 in the aggregate population of the twenty towns. Excepting a slight epidemic of measles in the spring, and the somewhat fatal prevalence of scarlet fever during the summer and early autumn, Brighton has been remarkably free from zymotic diseases during this year; only 10 deaths have been referred to enteric and simple fever since the 1st of January last. Considering the great risk which a watering-place like Brighton is constantly incurring of the importation of zymotic diseases, more especially during the prevalence of small-pox in London, it would be satisfactory to be assured that the sanitary authorities of Brighton possessed hospital accommodation for the isolation and treatment of any case of such diseases, which might any day be so introduced.

THE SMALL-POX EPIDEMIC.

THE last weekly return of the Registrar-General shows that 81 deaths from small-pox were registered in the week ending 18th inst. in 20 of the largest English towns, having a population of nearly seven millions of persons, against 46 and 61 in the two preceding weeks. These fatal cases occurred in London, Liverpool, Manchester, and Salford, whereas no fatal case occurred in any of the 16 other towns. The small-pox deaths showed, however, an increase in each of the four towns in which the disease is prevalent. In London the fatal cases, which had been 15, 21, and 48 in the three previous weeks, further rose to 52 last week, of which 27 were certified as unvaccinated, 16 as vaccinated, and in 9 cases the certificates did not give any information as to vaccination. Half the deaths from small-pox occurred in hospitals

and the other half in private dwellings; the latter mostly occurred in tenemented houses, where the isolation of the patients is impossible. All the 52 deaths from small-pox in the week occurred in the families of the labouring and artisan class, not one being recorded among the middle or upper classes. Although the fatality of the disease is still mainly confined to North and South London, it again showed wider distribution over the area of registration London; of the 52 registered fatal cases in London 4 originated in the West, 20 in the North, 2 in the central, 8 in the East, and 18 in the South groups of districts. The Small-pox Hospital at Hampstead has been brought into requisition, and contained 65 patients at the end of the week, in addition to 285 in the hospitals at Homerton and Stockwell. Thus the Metropolitan Asylum District Small-pox Hospitals contained 350 patients on Saturday last, against 185, 231, and 269 at the end of the three preceding weeks; these last returns show a larger increase in the number of hospital patients than in any preceding week since the beginning of the epidemic.

Outbreaks of small-pox are reported at Accrington, Burnley, Kendal, Swansea, and other places, but the numbers of cases and of deaths have at present been small. The Registrar-General continues to have cause to regret the omission of any information relating to vaccination in a large proportion of the medical certificates relating to deaths from small-pox. In one sub-district of Salford six deaths from small-pox were registered last week, of which three occurred in the Wilton Hospital and two in the workhouse, and yet not one of the certificates made any reference to vaccination.

THE VENTILATION OF HER MAJESTY'S SHIPS.

THE Construction Department of the Admiralty must be having just now rather a bad time of it. A very protracted inquiry, commenced more than a year ago, and the results of which are but just published, goes to show that, as sanitary science afloat is understood at Whitehall, the proper ventilation of a ship is utterly incompatible with her safety. H.M.S. *Vanguard*, supposed to be one of the most perfect ironclads in existence, seems, from the report now before us, to have been put hopelessly under the sea because the entirety of her water-tight bulkheads had been destroyed by some officer in the Controller's Department at Devonport, who conceived the (to their Lordships apparently insane) notion that comparative health at sea was, generally speaking, preferable to absolute safety, and so incautiously ordered ventilating openings to be cut through certain of these bulkheads. In this particular case the ship now practically ceases to exist; and it is perhaps immaterial to discuss whether, if she had not gone down in consequence of the imperfect state of her compartments, she might not have gone up from a gaseous explosion, the result of imperfect ventilation of the coal-boxes. But, as it appears that this piercing of bulkheads to promote ventilation (not to increase the risk of sinking) has been going on in no less than fourteen ships of the Royal Navy, it is incumbent upon us to ask on whom the responsibility rests of advising and seeing as to the sanitary condition of ships that are being continually planned, constructed, and launched, at a vast cost to the nation. We ask the question, but can answer it very promptly indeed. There is no sanitary officer in the Constructor's Office at Whitehall. The Medical Department of the Navy is never, and has never been, consulted as to the sanitary requirements of a ship, until she has been commissioned for some time, and her gross unhealthiness is demonstrated by some sort of epidemic. The sickness (quite irrespective of the mortality) caused by culpable carelessness in this matter is very large and wholly inexcusable. We have here, in this case of the *Vanguard*, a notorious instance of a Queen's ship, constructed most expensively, but with an entire disregard of all sanitary principles. A lame attempt is made to obviate the inevitable and evil result, which attempt, as we glean from the official report, causes the destruction of the ship.

We remarked some months ago, for the third or fourth time, that these expensive events will continue to occur until a skilled officer from the Medical Director-General's Department is attached to the Constructor's Office at Whitehall, whose duty it shall be, when the lines of a ship are drawn, to show in detail how each and every part of that vessel ought to be ventilated.

DUTIES AND POWERS OF A MEDICAL OFFICER OF HEALTH.

THE Harrogate Local Board of Health has unwittingly placed the profession under a lasting obligation by obstructing the local medical officer, Dr. Deville, in the discharge of his duties, instructing the inspector of nuisances to disobey his authority, and in various ways so vexing the practical question—what are the powers and duties of a medical officer?—that it has been necessary to obtain the judgment of a court of law. Nothing can exceed the perspicuity of the opinion expressed by the Lord Chief Justice: "The order of Dr. Deville, as officer of health, is in itself sufficient to make it obligatory on the inspector to do his duty, and though the board tell him not to perform his duty and obey the lawful orders of the officer of health, he is bound to obey. ..... They have no right to give the inspector instructions as to his discharge of his duties. The Act gives them no such authority; it is vested in the officer of health. Their order to the inspector not to obey is mere *brutum fulmen*, and will not protect him from the consequences of his disobedience of the lawful orders of the officer of health. Mr. Justice Lush and Mr. Justice Mellor concurred." It is impossible to exaggerate the importance of this ruling. A while ago we found it necessary to denounce in strong terms the conduct of Local Boards in preferring the opinions of inspectors to those of the medical officer. We protested against this disrespect to a lawfully-constituted authority as unwarrantable and obstructive, and we took occasion to assert substantially the judgment which has since been affirmed by authority. The medical officer is the appointed guardian of public sanitary interests. It is for him to act under the high sense of responsibility a commission so broad implies.

METROPOLITAN AMBULANCES.

IN spite of all our swagger and bombast about sanitary matters, it is to be confessed that in some simple practical matters we really do make a great mess of it. We are not usually in accord with Boards of Guardians, but the authorities of the City of London Union some few days ago very emphatically, and, as we think, very properly, discoursed about ambulances, and insisted that they ought, in the first instance, to be furnished by the hospital authorities of the Metropolitan Asylums Board. We quite subscribe to this view of the question, and there is no doubt that Dr. Brewer and his committee will at once order these vehicles to be stationed at Stockwell, Homerton, and Hampstead, so that they may be at call in any emergency case. But, we think, every union and district ought to be provided with an ambulance, and it is astonishing to us that, as a question of economy as well as efficiency, such an arrangement is not made in all the metropolitan districts. It is within our knowledge that the Port of London Sanitary

Authority has, in consequence of its extended district (eighty-six miles, we believe, in length), to borrow of riparian districts as to ambulance work. This is of course an unavoidable and costly proceeding, but, as we take it, the officers of that authority could give some noteworthy experiences as to the excessive inconvenience that arises from the fact that the responsibility of keeping an ambulance is utterly ignored by many metropolitan local authorities. Old cabs or other ancient vehicles are used for the purpose of transporting fever and small-pox patients. No system is adopted, and the practical result is an actual detriment to the patient, and a possible spread of the disease.

THE PRINCE OF WALES AND THE NORWICH HOSPITAL.

SOME time back, in consequence of the resources of the Norfolk and Norwich Hospital being found inadequate to meet the increasing claims on its accommodation, it was determined to enlarge it on the following plan:—Improvement of the existing buildings and the erection of two pavilions, each containing forty-four beds, the total expenditure for the whole alterations and additions being estimated at £22,000. Towards the augmented expense of working the hospital a further sustentation fund will be necessary, and with the object of obtaining increased support an influential meeting was held in the town on Monday last, on which occasion the supporters of the charity were fortunate enough to secure the attendance of the Prince of Wales. His Royal Highness moved the second resolution, "That it is desirable, both for the accommodation of the patients and the sanitary improvement of the hospital, that the proposed alterations and additions to the hospital shall be carried out, and that for this purpose an appeal be made to the county and city to raise the sum of £35,000 for the building and sustenance fund," and in most felicitous terms urged the claims of the hospital. We are happy to learn that very liberal subscriptions were promised in the course of the meeting. His Royal Highness has always evinced a warm interest in the prosperity of medical charities, and here he displayed an exalted appreciation of the value of medical services, and paid a graceful tribute to the fame of three former surgeons of the Norwich Hospital, Martineau, Dalrymple, and Crosse. The part taken by the Prince in initiating the work of restoration cannot fail to insure the success of the scheme, while it will infuse new life and vigour into the institution.

SCHOOL-BOARD DISCIPLINE.

ELEMENTARY education is an excellent thing in its way, but when it takes the form of corporal punishment, recklessly administered, or mental castigation by means of a "scare" produced by putting a small child in a dark closet, the question arises whether the intention of the Legislature in framing the Elementary Education Act is efficiently carried out. The case of a child clearly frightened to death a few days ago at a Board School, is important, as showing that these institutions require to be placed under very rigorous supervision. The use of birch and cane ought to be discarded, and the recourse to dark cupboards as penal appliances peremptorily interdicted. It is no doubt important that children should be instructed in the rudiments of knowledge, but we doubt whether it is expedient to make Board schools places of moral culture, at least such culture as requires for its advancement a discipline of pain and intimidation. We have more than once expressed some misgivings as to the sanitary condition of these schools, and the sufficiency of the precautions adopted to prevent the crowding together of large numbers of poor children daily from becoming a source of peril to the district. If measures are not at once taken to eliminate the birch and the dark cupboard from the discipline of the School Board, the community may have cause to regret the rule of King Stork, and look back with longing to the reign of Log, when, if little was done, that little did not prove to be physical and mental mischief.

MR. GLADSTONE AND VACCINATION.

CONSIDERING the present state of the public health, it was certainly necessary that something should be done towards eradicating, as far as possible, the mischief which was likely to accrue from Mr. Gladstone's letter regarding vaccination. Dr. Russell Reynolds has, with Mr. Gladstone's sanction, endeavoured to remove the very widespread misapprehension which a sentence taken from the letter in question had created. We can readily believe that Mr. Gladstone no more questions the use of vaccination, which is practised and repeated in his family, than he questions other well-established medical doctrines and practices; but we think it is to be regretted that, if he thought fit to discuss the subject at all, he did not make his meaning so plain as to be unmistakable. What we most regret, however, is that Mr. Gladstone did not altogether decline to discuss a matter about which he was confessedly ignorant, and that he should waste his powers and his time by acts of condescension which only minister to the vanity of the many mischievous and silly persons who are tempted to address him on this or any other subject.

SPIRITUALISM EXPLAINED.

IT is perhaps not often a professor of legerdemain can have a mission which a medical paper would feel called upon to recognise. The service rendered by Mr. Maskelyne, of the firm of Maskelyne and Cock, at the Egyptian Hall, is of a nature to command the interest of all who are concerned for the preservation of sane minds in healthy bodies. Mr. Maskelyne performs the stock tricks of "spiritualism," and outdoes them, at the same time avowing his intention of deceiving the eyes, and eluding the ingenious perceptive faculties of his audience. The dark *séance*, except that it is purposely divested of some of its disagreeable—perhaps we ought to say impressive—features, is so startling that the "spirits" would be severely taxed to produce a performance more astounding. We strongly recommend any one cherishing a latent thought that there is perhaps, after all, some truth in spiritualism, to be present at one of these interesting entertainments. If, after seeing what sleight-of-hand and ingenuity can accomplish in the shape of "manifestations" the visitor deems it necessary to fall back upon the hypothesis of super- or extra natural influences—or the supposed existence of any unknown force—to explain the "facts" of spiritualism, he will either be the victim of a delusion, or under the influence of a craze it is hopeless to relieve.

DIETING IN MERCHANT SHIPS.

AMONG the many causes of deterioration of seamen that now exist the system of dieting is by no means the least important. Steamships in the home trade—that is, those running constantly between London or Liverpool—and other coasting or Continental ports, are manned by sailors who either feed themselves or are fed by the captain. In the former case the men, shipped with a limited and often very inefficient supply of provisions, trust to the casualty stores that may exist to keep them from starving. When the captain, so to speak, "feeds" the ship, he receives a lump sum from the owners for the purpose, and it is notorious that large profits are often made by shipmasters in this

way, of course at the expense of their crews. They buy the cheapest provisions, and as little of them as is compatible with existence, and, as a natural consequence, the men come home half-starved or sick, are disgusted with the ship and her belongings, and leave her as speedily as possible. This question has commercial as well as sanitary aspects, for with vessels in the home trade, the cargoes of which are cleared and taken in very quickly, it is to the advantage of both owner and master to keep their seamen for as many trips as possible. Hence the policy at present adopted is suicidal as well as cruel. But it would appear that shipowners of all classes have yet to learn that no amount of care or legislation as to the structure and appointments of the vessel will make her seaworthy unless she starts with a sound and healthy crew, proper care being exercised during the voyage to ensure that they are maintained in a fair state of health. We trust, however, that this and other kindred matters relating to seamen will, in accordance with the promises of the Government in June last, receive prompt and effectual official attention next session.

THE ROYAL MILITARY ACADEMY, WOOLWICH.

THE relatives and friends of the gentlemen cadets by whom the scientific branches of the army—the Royal Artillery and Royal Engineer Corps—are maintained at their requisite strength, will be glad to learn that the medical officer reports very satisfactorily of the health of the Academy to the Board of Visitors appointed for the present year to inspect that institution. The medical officer thinks that the situation, the mode of life, and the large proportion of out-door employment are all in its favour. He thus finds that boys, after joining the Academy, improve in health considerably. The diet is liberal and wholesome. At present there are three in hospital, out of a total of 204; the average number is about 1½ per cent. There has been very little infectious disease. There was one case of measles in the Cadet Hospital; the second case was at once removed to the Herbert Hospital; and he considers that it is better to remove such cases to that hospital than to have a ward for them in the Cadet Hospital.

The Board find that the drains from the Academy are, excepting in so far as a check is afforded by ordinary trapping, in direct communication with the sewers of the town of Woolwich. Although they cannot point to any case in which disease has been occasioned in the Academy from noxious sewer gases, they are of opinion that the precaution should be taken of making a break in the continuity of the sewer which connects the Academy drains with the sewerage system of the town.

SUBURBAN SANITATION.

THOSE who wish to see to what extent the health of the inhabitants of some districts of this enlightened metropolis is neglected by the local authorities should pay a visit to Lachmere-road, in the parish of Battersea. This locality is on the south side of Battersea-park, and not far from Clapham Junction, and being at the foot of the north slope of Lavender-hill, presents perhaps a few obstacles to its efficient drainage. Still, as Lachmere-road is now so to our certain knowledge it was some years ago, and so probably it will remain for some years to come. The road is flanked on either side by small villas, and the population must amount to some hundreds. These villas seem all occupied—a proof, if proof were wanting, of the great need of house accommodation of this class in London. For our own parts we would on no account live in one of these said villas while the road between them is left in such a deplorable state. On Sunday it was in many places some inches deep in water, and where the water was not standing in large pools the soil was pounded up into a thick mud composed of dung and house refuse. It is only too evident that the road drain—if there be any—must be absolutely inefficient; that no metal has been put upon the surface of the road for a considerable period; and that if the scavengers have ever visited it, their visit must have been many months ago. We talked to one or two of the inhabitants who were standing at their doors, but their knowledge of the drainage or sewerage of the locality was *nil*. "Yes, it was disgraceful; very disgraceful." "The 'Board' had been written to." Promises had been returned, but no performance had as yet followed the promises. Perhaps some of our readers practising in that locality may be able to afford us some information of the state of health in this "dismal swamp."

PREVALENCE OF ENTERIC FEVER IN PARIS.

THE valuable report on prevalent diseases presented quarterly to the Société Médicale des Hôpitaux at Paris, by Dr. E. Besnier, bears striking statistical testimony to the great increase in cases of enteric fever in that city during the past three months, the number of cases being actually double that of the mean rate of the same quarter during the preceding four years. Thus, in the civil hospitals, the mean rate for the third quarter during this period has been 363 patients, with a mortality of 25 per cent. The same period in the present year has given 714 cases, with a mortality of 35 per cent., showing a marked increase not only in the gross number of cases, but in their severity. Our contemporary, *La France Médicale*, in drawing attention to the gravity of the epidemic, attributes this increased mortality to the severity of the early symptoms. The cases appear to be of a marked adynamic type, and the absence of diarrhœa and of epistaxis, with an unusual development of the rash, has been noticed in most of them. A temporary hospital has been opened for the reception of patients, and in some hospitals as many as twenty-four out of eighty patients are suffering from enteric fever. In the week ending Nov. 11th the mortality in Paris from typhoid rose to 171, as against 59 in the preceding week.

THE SCHOOL BOARD SCHOOLS AND THE SPREAD OF DISEASE.

CANON GREGORY'S criticism on an inaccurate statement as to the cost of soap in the schools of the London School Board is not worthy of its author. It is evident both that the enormous aggregation of children in the London schools will lead to the dissemination of disease unless the sanitary condition of the schools is very intelligently and thoroughly looked after, and that cleanliness is a most important thing to be insisted on in education. Our national schools must be clean, whatever else they may not be. We are not recommending any particular scheme of disinfection. We would even caution the Board to be critical as to the value of any disinfectants besides fresh air and perfect cleanliness, coupled with provisions for early information of cases of infectious sickness among the children; but, with these qualifications, let us have no niggardliness in the use of soap and of disinfectants.

THE ARCTIC EXPEDITION.

WE have not yet adopted the American system of "interviewing"; but, as it has been our good fortune this week to "interview" a very intelligent "blue-jacket" belonging to one of the Arctic ships, we are now in a position to state that no systematic issue of lime-juice took place on any of the sledging trips. Antiscorbutics indeed, in these expedi-

tions, appear to have been conspicuous by their absence; and hence it is our duty to remark, in effect, once more, that a very grave error has been committed, the onus of which rests either upon the shoulders of the commander of the expedition or upon those of the Medical Director-General of the Navy; and no one interested in Arctic exploration will be satisfied until this point is fully and fairly cleared up.

DR. BUZZARD'S LECTURES ON ELECTRO-THERAPEUTICS.

AT the Westminster Hospital, on Monday last, Dr. Buzzard concluded a short course of lectures upon electro-therapeutics, which were delivered by request to the medical class, and were attended besides by several members of the staff.

The lectures were of an elementary and practical character, and dealt exclusively with the nature and mode of employment of the constant current and the volta-induced currents of the secondary coil—the two forms of electrisation which practically cover the ground at the present day. The continuous flow of the constant current and the momentary character of the induced currents were very clearly exhibited by the aid of galvanometers, whilst many of the diagnostic as well as therapeutic uses of electricity were demonstrated upon patients suffering from hemiplegia, paralysis of the portio dura, saturnine and other forms of peripheral paralysis, progressive muscular atrophy, and lateral sclerosis with secondary amyotrophy.

It is our intention to publish the lectures at an early date.

THE LONDON WATER-SUPPLY.

A CONFERENCE was held last week of delegates from the various parishes of the metropolis, to consider and take steps with regard to the extension of the charges of the water companies of the metropolis, when it was resolved that a memorial be presented to the Home Secretary praying for an alteration of the law with respect to the water-supply of London. As it appears that the increased assessment of the metropolis is giving unlimited power to the water companies to increase the charge for water, such a step is urgently called for in order to prevent any further augmentation of the high prices we are already paying. When we contrast the large dividends from the shares of many of the water companies and the high premium at which they stand, with the scanty intermittent supply, drawn from polluted sources, and often but imperfectly filtered, we wonder the people of London have borne so long with the monopolists, especially when we consider the vexatious restrictions and petty means by which the companies endeavour to increase their income by the enforcement of "extra charges." We are not sanguine enough to believe that this appeal to the Home Secretary will lead to any present improvement in the quality and quantity of our water-supply, but we trust it will teach the water companies that there is a point beyond which, if they attempt to increase their extortions, the patient Londoner will turn and rebel.

DANGER OF "WAKES."

AN outbreak of typhus fever occurred in Leeds last month which created much apprehension, but at the present date the disease happily is subsiding. It appears that the first death took place on the 17th October, and on the body—that of a child—an Irish "wake" was held: a circumstance to which, in the opinion of the medical officer of health, the further mischief which ensued is attributable. The disease was propagated by means of the dangerous ceremonial, and sixteen persons were soon attacked, of whom three died. In another quarter of the town enteric fever is very prevalent, and is considered to be entirely due to defective drainage and badly-constructed houses. Dr. Goldie characterises the district—a new one—as a plague spot, and asserts advisedly that "all those persons who have inhabited the houses and those who are now living in them have had either typhoid or rheumatic fever." This is a grave indictment, and forces on the authorities the duty of effecting a comprehensive measure, such as the application of the Artisans' Dwellings Act, which shall sweep away what is a common and standing peril.

SMALL-POX AFLOAT.

THE facile way in which epidemic diseases are propagated in the metropolis was shown plainly enough last week, when the Port Medical Officer in London was informed as to a case of small-pox in the Surrey Commercial Docks. He visited the vessel immediately, and found the man, surrounded by seven or eight of his companions (all of whom drank and slept in the same cabin), with the eruption thick upon him. The patient was, of course, removed, and the cabin and all its belongings thoroughly fumigated and disinfected. But cannot the health officer of the Port of London find out how this man was infected, and where? We conceive it to be his duty to do so, in order that measures may be adopted to prevent the spread of the disease, afloat as well as ashore.

"DIED BY THE VISITATION OF GOD."

WE are accustomed to this verdict as a ready and suitable formula for British jurors to cover a multitude of enormities and to dismiss an awkward alternative; but that it should be taken as a sufficient explanation of the cause of death in so clear a case as the following almost surpasses credence. Mrs. Rebecca Laverton, a widow at Truro, in Cornwall, was in the habit of consuming a bottle of brandy, in addition to wine, every two days. She took no food, became very ill, sometimes kept her bed, refused to see a surgeon or to take his medicine, and died without any medical relief. Under such circumstances an inquest became imperative. We fail to see what considerations could have influenced the jury in determining on such a verdict, or the coroner in receiving it without further question, and should be glad of some explanation. In default of this, we can only say that we have rarely met with a more improper conclusion to a public inquiry.

THE South-Eastern Sanitary Association, whose efforts to abate certain nuisances on the Thames river side deserve every encouragement, lately endeavoured to secure the co-operation of the Woolwich Board of Works in an attempt to deal with noxious factories in the immediate neighbourhood of Woolwich. A deputation which waited on the Board failed to enlist the members in the work carried on by the Association. The chairman said there were no noxious factories in Woolwich, and a clerical member contended that the town was one of the healthiest in England. We venture to say that a walk on the river bank, when the wind is in the right direction, would convince anyone not impervious to effluvia that the nuisances sought to be obviated by the Association are unmistakably real.

DR. EDMUNDS has recently performed, for the second time, the operation of Cæsarean section, in which mother and child have recovered without an unfavourable symptom. The operation was an exact *replica* of the one recorded in detail by Dr. Edmunds in THE LANCET of Jan. 5th, 1861. The case occurred in the London Temperance Hospital, and was treated without alcohol.

IN a blue-book issued this week, containing the annual financial reports of Barbadoes for the past year, the inadequacy of medical relief in most of the districts is brought before the notice of the Home Government. It is urged, in the interest of the sick poor and the labouring population, that inducements should be given to secure at least one medical man to every parish. "The prizes of the profession—such as they are, and they are poor enough too—are all in St. Michael, and medical men naturally gravitate to that parish." A feasible plan is presented by which a surgeon would be appointed to each parish, and an arrangement made that one of the number should visit the district hospital in turn daily. For the duties they would have to perform it is proposed that each medical officer should be paid a salary of £300 a year from the Treasury, and should be allowed general practice, public—such as attendance on prisons and police stations—and private. The statement made in this connexion regarding the salaries of medical men in British Guiana is inaccurate and misleading, and should be rectified.

A MOST praiseworthy activity is being shown generally by the metropolitan medical officers of health in instituting measures calculated to prevent the spread of small-pox. Regulations are drawn out and handbills widely distributed containing instructions, the object of which must be understood by all. Thus the inhabitants are warned that in sending a child to school after suffering from small-pox, without first obtaining a certificate from a qualified medical man to the effect that such child is convalescent and free from infection, a liability to prosecution under the Public Health Act is incurred; they are told of the penalties for wilfully exposing infected bedding, clothing, &c., and the attention of parents is forcibly directed to the prime importance of vaccination and revaccination. If the public will loyally do all in their power to further the action of the health authorities, the disease which is now epidemic in the metropolis will soon be stamped out.

THE sanitary condition of Philadelphia during the Centennial Exhibition is being discussed in our American contemporaries. Although the rate of mortality was not augmented, it appears that there was a large proportion of febrile affections under treatment during the period. The forms which these affections assumed were simple intermittent fevers, typhoid and typho-malarial fever, and catarrhal complaints, with great prostration. It is urged by the medical director [of the International Exposition that the vast majority of the cases that occurred have been due, not to any especially unhealthy influences connected with the grounds, but to exposure while travelling, or neglect of the ordinary laws of health while in the city. On the other hand, the complaint is made that the water-supply of Philadelphia is impure, and the sewerage very defective.

OWING to the inadequacy of the accommodation afforded by the Dundee Lunatic Asylum, it has been decided to construct a new establishment, consisting of two buildings, one for paupers and the other for paying patients, the former having room for 280 and the latter for 70 patients, but both being capable of extension should the necessity arise. A theatre, billiard-room, &c., will be provided for the amusement of the inmates, in accordance with the modern enlightened views of the treatment of mental disease. The directors also intend that a farm shall be worked in connexion with the institution, in order to provide healthful means of employment for the able-bodied patients. Building operations will be commenced immediately.

Apropos of a case of prosecution for the illegal practice of medicine, recorded in another column, it is especially gratifying to find a licensing body like the Apothecaries' Company, which has too long neglected its duty, can be compelled to take action for the protection of the community and the defence of its own licentiates. As regards the course pursued by the East London Defence Association, we think it judicious and creditable. When a defence association can move a corporate authority with licensing powers to put the law in action, the triumph is twofold. Besides the specific success there is the assertion of a principle. We venture to hope other associations may take the same line, and with equally desirable results.

THE *World* states that Dr. L. S. Forbes Winslow, in a pamphlet, has estimated the number of persons affected with what he terms "Spiritualistic Madness," in the public asylums of the United States, at 10,000. This is one of those random conjectures which damage rather than advance a good cause. The number of patients alleged to labour under "Religious Madness" has been estimated *for the public* in the same fashion. We confess it is with suspicion we regard all these quasi-professional statements. The medical appeal ought, we think, always to be addressed to a medical tribunal. If medical men write for the public, it should be distinctly in their private capacity.

DR. HENRY LOWNDES has been appointed Consulting Surgeon to the Liverpool Northern Hospital, having tendered his resignation after fifteen years' service. In receiving his resignation, the committee passed a special vote of thanks, expressing regret at losing Dr. Lowndes' services. Dr. Lowndes was appointed under a former rule of the hospital, which limited the tenure of office to fifteen years; since then the term has been extended to twenty-one years. Dr. Lowndes, however, declined to avail himself of this extension, considering himself bound by the rule under which he was elected.

THE parish of St. George (Hanover-square) is in an unusually good state of health, the death-rate, according to the most recent returns, being only 14·36 per thousand. There has been no death from small-pox as yet. At the last meeting of the sanitary authority Dr. Corfield, medical officer of health, urged the importance of revaccination, and showed that in the last epidemic of small-pox, out of 15,000 cases of the disease, 4 persons only who had been revaccinated were attacked, and each of them had it in a very mild form.

SCARLET FEVER has prevailed in Southall for the last six months, and of late increased so much that the Uxbridge Rural Sanitary Authority became alarmed, and demanded a special report of the epidemic from their medical officer. In this report it is stated that the disease owes its origin to imported cases, and that it is aggravated by the very imperfect drainage of the district. The recommendations made, that all schools should be temporarily closed, and the main sewer of the village be entirely relaid, should be carried out at once.

THE mortality in London last week was at the rate of 28 per thousand annually. There were registered 1886 deaths, including 52 from small-pox, 16 from measles, 55 from scarlet fever, 6 from diphtheria, 27 from whooping-cough, 33 from different forms of fever, 16 from diarrhœa, and 593 referred to diseases of the respiratory organs. Of the latter number 377 were due to bronchitis, and 153 to pneumonia. Different forms of violence caused 61 deaths.

THE melancholy death of Dr. Brunton, house-surgeon at the Paisley Infirmary, through carelessness of the nurse in attendance, calls for notice. The case was one of fever; during delirium the patient escaped, scaled a wall, and fell stunned and died. We think the medical staff of the Paisley Infirmary owe it to the profession to institute an inquiry, and explain how this terrible "accident" occurred.

THE emigrant ship *Hurunui* was finally inspected by the officers of the Board of Trade on the 10th inst. at Plymouth, and allowed to proceed on her voyage to New Zealand, after a delay of five weeks on account of scarlet fever and diphtheria.

DR. BROWN-SÉQUARD will give two lectures this week, and one next week, at the King and Queen's College of Physicians in Ireland, on subjects connected with cerebral affections.

DR. J. C. STEELE, Superintendent of Guy's Hospital, has been awarded the Howard Medal of the Statistical Society.

THE WIDOW OF SIR CHARLES BELL, K.H., F.R.S.

ON Thursday, November 9th, Marion, the widow of Sir Charles Bell, died at her residence in London. As the personal friend of almost all the leading members of the medical profession for half a century, and as the wife, companion, and aid of an eminent surgeon and physiologist—whose name ranks with those of the Hunters, Harvey, and Jenner—a brief memoir of her life will no doubt be looked for in our columns.

Lady Bell was the daughter of Mr. Charles Shaw, provost or first magistrate of Ayr, and the sister of Sir Charles Bell's two favourite pupils, and subsequent assistants in his scientific labours, John and Alexander Shaw. Her sister Barbara married Charles Bell's elder brother, George Joseph Bell, the eminent advocate, and author of a work on the Laws of Bankruptcy, which, quoting from Lord Moncrieff, "was afterwards expanded into a profound commentary on mercantile law, and will ever remain as a monument of his learning, sagacity, and logical power."

Marion Shaw, as we learn from one who knew her intimately and throughout the greater part of her life, was possessed of much personal beauty, as well as of considerable grace of mind. Writing in 1844, Lord Cockburn, in his Memorials, says:—"There was one fair figure, however, that haunted my memory; that of her who in former days was Marion Shaw, and is now the widow of Sir Charles Bell. Beauty such as hers was enough for one city. That portion of it which belongs to the mind is as bright and as graceful as ever, and there are few forms with which time has dealt so gently."

In 1811 she married her brother's friend and teacher. Up to this time, she has told us in her Recollections, she had heard nothing of medical science, "but as he (Charles) craved for sympathy, I happily could think of nerves merely as connecting threads, traced by his pencil, and showing 'design.'" Soon the husband's literary and scientific pursuits became the wife's occupation and pleasure, and Lady Bell devoted herself as her husband's amanuensis while he was engaged in his works on the "Anatomy of Expression," "Animal Mechanics," and "The Hand." These subjects being suited to her taste, greatly interested her, while to her ease and readiness in composition the diction of the works owes much of its purity and force. Thus in his wife did Sir Charles Bell find not only an affectionate sympathiser, but an intelligent and faithful helper.

After her husband's death she did not allow the fine qualities of her mind, which had been so well exercised during his lifetime, to become dormant. She kept herself well informed in many branches of knowledge, especially those which bore upon her husband's favourite subjects, and being a clever and engaging conversationalist, her society was accordingly much appreciated by the wits and savants of her day.

Among other worthy employments of her long life, she assisted Mr. Alexander Shaw in bringing out successive editions of the "Expression," and "The Hand," the ninth edition of the latter having been published so late as 1874. In 1870, in her pleasing "Recollections," appended to "Letters of Sir Charles Bell," she contributed a well-written memoir of her late husband. No better idea than that afforded by a perusal of these letters can be gained of the amiable qualities of a mind which for thirty-one years was the source of unchanging sunshine to the great physiologist.

Appreciating highly, as she knew well, the works and worth of Sir Charles, and being proud, with an affectionate pride, of his great reputation, which gathers with the rolling years, Lady Bell rightly concluded that the silent witnesses of his unceasing labour and genius would now, and in time to come, have interest for all those who study his writings. With this feeling she presented, in the summer of 1866, through the Secretary of State for War, to the Army Medical School, a series of seventeen water-colour drawings executed by Sir Charles, and illustrative of wounds received at the battle of Waterloo. Accompanying the drawings was a sketch-book made use of by him at Brussels in 1815, containing the original sketches from which the large drawings were made, and an interleaved copy of his "Dissertations on Gunshot Wounds," which he carried with him to Brussels and used as a note-book for putting down memoranda of most of the cases figured in the water-colour drawings. Six interesting original letters were also included in the present by Lady Bell, and the whole collection was rendered more complete from being accompanied by a descriptive catalogue by Mr. A. Shaw. Professor Longmore, in his published account of the drawings, remarks: "The value of these acquisitions to the Army Medical School, whether regarded simply as works of art, or in their relations to the history of military surgical science and practice, or as souvenirs of the handiwork of the distinguished author of the 'Anatomy of Expression,' can hardly be over-estimated." In the same spirit, too, she last year gave to Mr. Shaw her husband's illustrated Journal, in three parts, of their Travels in Italy, requesting him to pass it on to the library of the University of London; and to Mr. Henry Morris several original water-colour drawings of important surgical cases, some of which are now historical, for the museum of the Middlesex Hospital.

To the last Lady Bell (like her grandfather, Dr. David Shaw, D.D., of Coylton, who reached his ninety-second year) remained in possession of all her faculties, and it was impossible to converse with her without feeling that her mind was as a well-stocked garden of choice flowers, selected with taste and cultivated with care.

In the summer of the present year she was strong enough to visit valued friends in the country, but after her return, and about five weeks ago, she was attacked by pneumonia, from which, however, she rallied, but not for long; bronchitis shortly supervened, and she died at the ripe old age of ninety, admired, respected, and beloved by all who had the good fortune to know her.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

THE following is a copy of the report read at the last meeting of this Society from the delegates of that body appointed to attend at the recent International Congress at Philadelphia:—

To Sir JAMES PAGET, Bart., *President of the Royal Medical and Chirurgical Society.*

DEAR PRESIDENT,—As the delegates nominated by you to represent the Royal Medical and Chirurgical Society at the Medical Congress held at Philadelphia in September last, we beg leave to offer a brief report of our mission.

We all reached Philadelphia in time to take part in the active business of the Congress, but not in time to assist in settling the preliminary arrangements or the appointment of officers. We were, therefore, agreeably surprised to find that by a graceful act of courtesy of our American bre hren two of your delegates had been elected presidents of sections—namely, Dr. Barnes of the Obstetrical Section, and Mr. Brudenell Carter of the Ophthalmological Section.

The President of the Congress, you are aware, was Professor Gross, a man whose commanding reputation as a surgeon and whose eminent personal character could not fail to secure the first essential of success, a splendid gathering of fellow workers animated with scientific zeal and cordial sympathy.

A programme of the Constitution of the Sections and of the business transacted accompanies this Report. It will be sufficient to state here that there were sections for Medicine, Biology, Surgery, Dermatology and Syphilology, Obstetrics, Ophthalmology, Otology, Sanitary Medicine, and Mental Diseases. Addresses were delivered, in Medicine, by Dr. Austin Flint; on Hygiene and Preventive Medicine, by Dr. Henry J. Bowditch; in Surgery, by Dr. Paul F. Eve; on Medical Biography, by Dr. J. M. Toner; on Obstetrics, by Dr. Theophilus Parvin; on Medical Jurisprudence, by Professor Stanford E. Chaille; on Mental Hygiene, by Dr. John P. Gray; on Medical Literature, by Dr. T. G. Richardson; and on Medical Education and Medical Institutions, by Professor N. S. Davis.

The Sections held their meetings in the new University of Pennsylvania, a handsome and well-appointed building, admirably adapted for the work and comfort of the members.

Four hundred and forty-seven delegates attended. Of these, seventy-one were foreigners. The Sections were literally thronged to overflowing with delegates, members, and visitors who had flocked together from every part of the vast continent of the United States and Canada. And although scientific gatherings so constituted often find it difficult to sustain the due state of philosophical abstraction from competing social attractions, the meetings were marked by the most earnest and steady attention to the business throughout.

Judged by the elevation of tone and ability displayed in the addresses, by the selection of topics for discussion, by the learning and masterly grasp by which the memoirs were distinguished, by the numbers and prominence of the men who led the discussions, and by the scientific yet practical value of the results, the great Medical Congress of Philadelphia must be pronounced a splendid success, deserving to be remembered as an epoch, not alone in American, but in cosmopolitan medical history.

All this, knowing as we do the great position held by our American brethren in the medical world, might have been predicated with confidence. It may seem superfluous for us to say it, but strong feelings will have utterance. We cannot refrain from expressing our admiration for the completeness and harmony of the conception and design of this Congress, and for the strength of purpose and working skill with which the whole was carried out to the full realisation.

At the last general meeting of the Congress an address to the President was presented by Dr. Hare on behalf of ourselves and the other British delegates, congratulating him and the several committees on the complete success of the Congress, and heartily thanking them for the unbounded kindness and hospitality with which we had been received. But we cannot conclude without attempting to convey to you, Mr. President, and through you to the Society which it was our good fortune and privilege to represent, how warmly we appreciate the unceasing exercise of all those marks of thoughtful kindness and consideration so grateful to visitors in a strange country, which were so successful in making us feel we were at home, and which contribute so much to make up a store of pleasant memories.

In addition to numerous private receptions, a public reception, in the Judges' Hall in the Centennial grounds, was presided over by his Excellency the Governor of Pennsylvania (Governor Hartranft), which was attended by a large contingent of ladies and other visitors.

We feel that our faith in the strong sympathy, kindred and professional, of our American brethren, warrants us in conveying to our fellow-members of this Society the assurance that the like cordial welcome awaits any of them who may be tempted, as we hope many will be tempted, to seek a playground on the other side of the Atlantic.

We have the honour to be, dear President,

Yours faithfully,

ROBERT BARNES, M.D.,
CHARLES J. HARE, M.D.,
R. BRUDENELL CARTER, F.R.C.S.

London, November 13th, 1876.

THE SOCIETY OF APOTHECARIES AND MR. WITHERINGTON.

IN the Exchequer Division of the High Court of Justice, on Tuesday last, the 21st November, 1876, before Baron Pollock and a common jury, Sydney Herbert Witherington, a registered member of the Pharmaceutical Society, carrying on business at 410, Wandsworth-road, Surrey, was sued by the Society of Apothecaries, at the instance of the East London Medical Defence Association, under the Apothecaries' Act, for the recovery of a penalty of £20 alleged to have been forfeited by the defendant for illegally practising as an apothecary. Mr. Lewis Glyn (instructed by Messrs. Green and Pridham) represented the plaintiffs. Witnesses were called by the plaintiffs, who proved that the defendant had attended and prescribed medicine for their children and themselves, and that they had obtained several bottles of medicine from his shop. The defendant, in his defence, relied on a deed of partnership made between himself and a registered member of the Royal College of Surgeons, England, and contended that he had only attended the witnesses as an assistant to the said surgeon. His lordship, on perusing the deed, which had been handed in by the defendant, said that it made the plaintiffs' case stronger, inasmuch as it recited that the defendant and the qualified surgeon had entered into partnership to carry on the practice of general medical practitioners. No further evidence was offered on the part of the defendant, and after a careful summing-up by the judge, the jury immediately returned a verdict for the plaintiffs for the amount claimed, and his lordship ordered judgment to be entered accordingly with costs.

Correspondence.

"Audi alteram partem."

SCURVY AND THE ARCTIC EXPEDITION.

To the Editor of THE LANCET.

SIR,—There appears to be just now in some quarters a tendency to relegate to alcohol the place which was formerly occupied by salt meat as a supposed active agent in the production of scurvy, and with even less foundation on fact. It should not be forgotten that in its campaign in the Caucasus during the winter of 1855-56 the army of Omar Pasha suffered terribly from scurvy. At Trebizonde shiploads of cases came into hospital under the care of the British medical staff (on which I was then serving), recalling, in their intense severity, the descriptions of the disease contained in the voyages of the early navigators. "Large numbers," as I have mentioned in the article Scorbutus,

Reynolds's System of Medicine, "died upon the sea-passage, in their transit from the shore to the hospital, and soon after their admission." These Mussulmans had eaten no salt meat, and, it is scarcely necessary to add, had not tasted any form of alcoholic liquor, but they suffered very much more severely than did the English and French troops in the Crimea at the same date, who consumed both these articles of diet. The simple explanation is that the Turks were very imperfectly fed, and had not any fresh vegetable food or lime-juice.

With many others, I am looking with anxious interest for an explanation, not of the cause of the outbreak of scurvy in the sledging parties of the recent Arctic Expedition, because surely that must have arisen from the supply of fresh vegetable juice having been defective in quantity or quality, but of the circumstances under which such a disastrous failure in necessary provision occurred.

I am, Sir, yours faithfully,

Grosvenor-street, Nov. 21st, 1876. THOMAS BUZZARD.

To the Editor of THE LANCET.

SIR,—Pending the publication of the Medical Report of the Arctic Expedition, there is, to my mind, nothing unsatisfactory in the particulars furnished by Captain Nares respecting the outbreak of scurvy. The fact of the heavy labour of sledge-travelling developing the scorbutic condition in men deprived of a form of food essential to the maintenance of health and vigour is obvious. A man might be filled with all the good things provided for the Arctic expedition, but, lacking one thing needful, he would be certain to be starved when he came to put forth his strength continuously; and there was nothing, or not sufficient, to supply the waste. The "one thing needful" was, as Dr. Rae has pointed out, certainly not alcohol; whether it was or was not lime-juice I shall be glad to offer my testimony towards explaining when the medical report of the expedition has appeared.

I am, Sir, yours, &c.,

THOS. A. ROE,

Totnes, Nov. 21st, 1876. Late Med. Inspector for the Board of Trade.

To the Editor of THE LANCET.

SIR,—Permit me to add my humble testimony to the truth of Dr. Rae's remarks in your last number on the debilitating effects of alcohol. When travelling two years ago in the upper Sikkim Himalaya, at elevations above 12,000 feet, I several times took small quantities of whisky, not above half a wineglassful at a time in about six ounces of water, to counteract, as I imagined, the wearying effects of strong exertion at high elevations and at a low temperature. Each time the consequence was the very reverse of what I anticipated; for very soon after the spirit had been taken there came on an almost overpowering sense of drowsiness and lassitude, lasting an hour or more. I very soon substituted strong cold tea, with the happiest result; for not only did it refresh one's flagging energy, but also quenched distressing thirst effectually, and produced a feeling of exhilaration and capacity for renewed efforts; and ever after my spirit-flask contained nothing but tea. My natives not only never used spirituous drinks while on the march, but very seldom drank even water, which they said weakened them and affected their wind. Sportsmen in India well know the prejudicial effects of spirits in impairing steadiness of aim and powers of endurance, and many of them therefore use tea only when in the jungle.

I remain, Sir, yours faithfully,

Fletching, Nov. 21st, 1876. W. J. TRENTLER, M.B. Edin.

THE LODGING-HOUSE SYSTEM AT THE UNIVERSITIES.

To the Editor of THE LANCET.

SIR,—In an article in THE LANCET of Saturday last upon the Lodging-house System at the Universities, after making comments on certain allegations of the Dean of Chichester with respect to lodging-houses at Oxford, the writer asserts that "neither at Oxford nor Cambridge do the Lodging-House Syndicate trouble themselves about sanitary arrangements, either upstairs or downstairs," &c. It is not my intention to trouble you with any remarks on the Dean of Chichester's paper, which will be answered elsewhere; but the accusation brought against the Universities in your columns is in itself so serious, and the publication of it in your journal secures for it so wide a circulation, that I trust you will afford me space for an immediate and emphatic denial, so far as Oxford is concerned, of the whole of the charges made, generally and in detail. There is not one of the points in which negligence is alleged to exist which has not had, and does not receive, systematic and minute attention. One of the first measures adopted by the Oxford Lodging-house Delegacy, when it was appointed in 1868, was a careful inquiry into the sanitary conditions of every house then used for university lodgings. In 1871 the services of a highly qualified medical gentleman, since appointed to be a County Inspector of Nuisances, were engaged. He inspected and reported upon every house licensed, or proposed to be licensed, and continued to act as medical referee to the Delegacy until he left Oxford a few months ago. At the present time, when application is made for a licence, the house is inspected by one of the delegates, usually by myself. The drainage, water-supply, ventilation, and cleanliness are all attended to; inquiry is made as to the number of inmates, with a view to prevent overcrowding; every sink and closet is examined, and the soil-pipes of in-door closets are required to be ventilated. If an infectious disorder occurs in a house, no undergraduate is allowed to reside there until a medical certificate has been received that the premises have been properly disinfected. I enclose a leaf of my note-book, to exhibit the form in which the particulars relating to each house are recorded.

I am, Sir, your obedient servant,

GEO. S. WARD, M.A.,

One of the Delegates for Licensing Lodgings.

Hertford College, Oxford, Nov. 22nd, 1876.

INTRA-THORACIC CANCER.

To the Editor of THE LANCET.

SIR,—Dr. Burney Yeo, in his clinical lecture on Mediastinal Cancer, in your last week's issue, says that "the vocal cords were seen to be white and natural, and free from any thickening or ulceration; but the left vocal cord was flaccid and motionless, in a position between adduction and abduction." Further, he adds—"I am not aware that any one, in this country at least, has hitherto demonstrated a paralytic affection of the vocal cords as observed accompanying thoracic cancer."

Without claiming any particular credit for it, permit me to draw Dr. Yeo's attention to a case of intra-thoracic cancer, published by me in THE LANCET of October 24th, 1874, in which it is stated that on examination by the laryngoscope it was found "the left vocal cord was found to be paralysed, while the right was acting normally. Both were free from any visible disease, as was also the larynx and trachea, so far as could be seen."

Further cases will doubtless serve to indicate the diagnostic value of the paralysis mentioned.

I am, Sir, your obedient servant,

Glasgow, Nov. 20th, 1876. M. CHARTERIS.

SANITARY GYMNASTICS.

To the Editor of THE LANCET.

SIR,—My attention has been called to an interesting record, in THE LANCET of last week, by Mr. Edmund Owen, F.R.C.S., &c. &c., of a "Gunshot Injury to the Musculo-spiral Nerve" successfully treated by the Swedish system of "manual treatment," commonly called "the Movement Cure." In that record, which I hope will be widely studied, it is implied that the so-called "Swedish Institution" of Dr. Kellgreen, in Pimlico, is the only place in London where this mode of treatment can be found; and as I am a great admirer of the system, and also a lover of justice, I hope you will allow a space in your next impression for this statement, that the "Movement Cure,"

as established at the beginning of the present century in Sweden by Professor Ling, was introduced into London about twenty-six or twenty-seven years ago by his grandson-in-law, Professor Augustus Georgii, of 7, York-place, Portman-square. I have no wish to detract from the merits of Dr. Kellgreen, either in the treatment of the special case herein referred to, or in his general practice of this mode of cure; but in justice to Professor Georgii (who is himself too diffident for his own interests) and for the benefit of the many whose health of nerve and muscle might be restored by his skilful movements, I beg you to make known in your valuable publication that the Swedish system of Medical Gymnastics is practised in York-place by Professor Georgii, who was one of the earliest medico-gymnasts in London.

I beg also to request your perusal of the accompanying pamphlet edited by the Professor, and describing Ling's method of treatment.

I enclose my card, and have the honour to be, Sir, faithfully yours,

AN ADMIRER OF THE SWEDISH "MOVEMENTS" AND A LOVER OF JUSTICE.

Medical News.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.—The following gentlemen, having passed the required examination for the diploma, were duly admitted Members of the College at a meeting of the Court of Examiners on the 16th inst.:—

Benthall, Albert, L.R.C.P. Edin., Twickenham.
Calcott, Lewis B., Oundle, Northamptonshire.
Capon, Herbert J., Bunhill-row.
George, George A., Romsey, Hants.
Goodsall, Fredk. W. W., L.S.A., Highbury New Park.
Hallsworth, Francis A., L.S.A., Atherstone.
Jaquet, John L., L.S.A., Vincent-square.
Livesey, Ernest W., L.S.A., Victoria-street.
Masáni, Hormasji D., L.M. Bombay, Bombay.
Masters, John A., L.S.A., Greenwich.
Norris, Edward S., B.A., Kennington-road.
Pedley, Thomas F., L.S.A., The Terrace, Camberwell.
Porter, Charles F., Fleetwood, Lancashire.
Vasey, James A., Cavendish-place.
Vipan, Charles, Lansdowne place.
Willows, Robert G. E., Chesterton, Staffordshire.

Of the 93 candidates examined during last week, 63 passed to the satisfaction of the Court of Examiners and received their diplomas; 8 passed in Surgery, and when qualified in Medicine will be admitted Members of the College; the remaining 22, having failed, were referred for six months' further professional study; 14 candidates who passed in Surgery at previous examinations, having subsequently obtained medical qualifications, were also admitted Members.

APOTHECARIES' HALL.—The following gentlemen passed their examination in the Science and Practice of Medicine and received certificates to practise on Nov. 16th:—

Bowen, Owen, Llandilo.
Butler, Samuel, Bridge-street, Wednesbury.
Mills, Robert James, Norwich.

The following gentlemen also on the same day passed the Primary Professional Examination:—

John Melvin Campbell, St. Bartholomew's Hospital; John Christian, St. Thomas's Hospital; William Pearce Jago, London Hospital.

THE will of Dr. Francis Sibson, F.R.S., who died on the 7th September, has been proved under £6000.

ST. MARY'S HOSPITAL MEDICAL SCHOOL.—Mr. G. C. R. Bull, late of Epsom College, has obtained the vacant Exhibition in Natural Science.

THE SERVIAN WOUNDED.—Dr. MacKellar, who has been attending the sick and wounded during the war, returned to London on the 17th inst., to resume his duties at St. Thomas's Hospital.

OBSTETRICAL SOCIETY OF DUBLIN.—The following office-bearers have been elected for the ensuing session:—President: Thomas Darby. Vice-Presidents: Thomas M. Madden and Stephen Mac Swiney. Treasurer: William Roe. Committee: John Denham, Alfred H. McClintock, George Johnstone, Lombe Atthill, and George H. Kidd. Hon. Secretary: J. R. Kirkpatrick.

THE dredging operations in Whitby Harbour to which we have already referred, are carried on vigorously; over 18,000 tons of silt, &c., having already been removed and deposited in deep water at sea. It is expected that the salubrity of the town will be much enhanced on the completion of this measure.

Medical Appointments.

ANGOVE, W. T., M.R.C.S.E., L.S.A.L., has been appointed House Surgeon to the Great Yarmouth Hospital, vice Bond, resigned.

BARKWAY, F. T., M.R.C.S.E., L.S.A.L., has been appointed Medical Officer and Public Vaccinator for the Lavenham District of the Cosham Union, and Medical Officer of Health for the Lavenham Sub-district of the Cosford Rural Sanitary District, vice White, deceased.

BIDEN, Mr. W. P., has been appointed Assistant Surgical Officer to Charing-cross Hospital, vice Conolly.

CAYLEY, W., M.D., F.R.C.P., has been appointed Lecturer on Medicine to the Middlesex Hospital Medical College, vice Greenhow, resigned.

CHURTON, T., M.B., has been appointed Honorary Physician to the Leeds Public Dispensary.

CONOLLY, B., M.R.C.S.E., has been appointed Resident Surgical Officer to Charing-cross Hospital, vice Strange.

COUPLAND, S., M.D., M.R.C.P., has been appointed Lecturer on Pathological Anatomy at the Middlesex Hospital Medical College, vice Cayley, resigned.

DAWSON, E., L.F.P.S.G., L.S.A.L., has been appointed Medical Officer of Health for the Finchingfield Sub-district of the Braintree Rural Sanitary District, vice Rust, resigned.

FIRTH, C., M.B., M.R.C.S.E., has been appointed House Surgeon to the Norfolk and Norwich Hospital, vice Baumgartner, resigned.

FITZGERALD, F. C., L.K.Q.C.P.I., L.R.C.S.I., has been appointed Medical Attendant to the Royal Irish Constabulary, Newtownbutler, vice J. Fitzgerald, M.R.C.S.E., resigned.

FOULDS, S., L.R.C.P.L., M.R.C.S.E., has been appointed Medical Officer to the Chesterfield Post-office.

GIBBINGS, A. T., M.D., M.R.C.S.E., L.S.A.L., has been appointed Medical Officer for No. 7 District of the Hackney Union, vice Long, appointed to No. 1 District.

GREEN, T. W., M.D., M.R.C.S.E., L.S.A.L., has been appointed Medical Officer of Health for the Rawtenstall Urban Sanitary District, Lancashire.

GWYNNE, G., L.R.C.S.I., has been appointed Medical Officer, Public Vaccinator, &c., for the Templemartin Dispensary District of the Bandon Union, co. Cork, vice Nason, appointed to the Rathcormac Dispensary District of the Fermoy Union.

HAY, T. R., M.R.C.S., L.R.C.P., &c. (formerly of Islington), has been appointed Physician to the Hospital and Lecturer on Materia Medica at the New School of Medicine, Christchurch, New Zealand.

JOHNSTON, A. C., L.K.Q.C.P.I. & L.M., has been appointed Medical Officer and Public Vaccinator for the Parish of Kirkmabreck, Kirkcudbrightshire, vice Jackson, whose appointment has expired.

KINGSTON, W. Y., M.D., has been appointed Medical Officer for No. 8 District and the Workhouse of the Woodbridge Union, Suffolk, vice Hibberd, resigned.

KINKEAD, R. J., M.D., has been appointed Professor of Midwifery at Queen's College, Galway, vice Doherty, deceased.

LAKIN, C., L.R.C.P., L.M., L.S.A., L.A.H., has been appointed Medical Officer to the Pioneer Division (No. 478) of the Sons of Temperance, at Leicester.

LISTER, J., F.R.C.S.E., has been appointed a Consulting Surgeon to the Doncaster Infirmary and Dispensary, on resigning as Surgeon.

LONG, M., M.D., L.R.C.S.I., L.S.A.L., has been appointed Medical Officer for No. 1 District of the Hackney Union, vice Welch, resigned.

MACDONALD, J., L.F.P.S.G., has been appointed Medical Officer and Public Vaccinator for the Parish of Barvas, Island of Lewis, vice McAulay, resigned.

MACLEAN, H., L.R.C.P.Ed., L.R.C.S.Ed., & L.M., has been appointed Medical Officer and Public Vaccinator for the Longford District of the Ashborne Union, vice O'Connor, resigned.

MANDERS, H., M.R.C.S.E., L.S.A.L., has been appointed House Surgeon to St. Peter's Hospital, Berners-street, vice Cole, resigned.

OLDHAM, C. J., F.R.C.S.E., L.R.C.P.L., has been appointed a Surgeon to the Sussex and Brighton Infirmary for Diseases of the Eye, vice Murray, resigned.

POTTS, L., L.S.A.L., has been appointed Resident Medical Officer to Charing-cross Hospital, vice Phillips.

PURNELL, T., M.D., L.R.C.P.Ed., has been reappointed Medical Officer of Health for the Wells Rural Sanitary District for three years.

RICHARDS, J. E., L.R.C.P., L.R.C.S., & L.M., has been appointed Medical Attendant to the Borough Fever Hospital, Huddersfield.

SHAW, J. C., B.A., M.D., M.B., M.R.C.P.L., M.R.C.S.E., & L.S.A., has been appointed Medical Superintendent of the Middlesex County Lunatic Asylum, Banstead.

SNELL, E., F.R.C.S.Ed., M.R.C.S.E., L.S.A.L., has been appointed Medical Officer and Public Vaccinator for the newly-formed No. 3 District of the Nottingham Union.

TENNENT, W. A., L.R.C.P., has been appointed Medical Officer and Public Vaccinator for the Districts of Allonby and Abbey-Holmes, Wigton Union, vice Robison, deceased.

THOMAS, J. L., M.D., F.R.C.S.Ed., has been appointed Assistant-Physician to the Royal South Hants Infirmary, vice Broster, resigned.

TUCK, B. J., M.R.C.S. & L.S.A., J.P., has been appointed Visiting Medical Officer to the Seaford Convalescent Hospital.

VAWDREY, T. G., L.R.C.P.L., M.R.C.S.E., has been appointed Medical Officer to the London Works Iron Company's Sick Society, Smethwick, vice Shaw, deceased.

WHITEHEAD, Mr. H., has been appointed Resident Obstetrical Officer to Charing-cross Hospital, vice Potts.

WICKENS, H. A., M.R.C.S.E., has been appointed Assistant Medical Officer to Charing-cross Hospital, vice Biden.

Births, Marriages, and Deaths.

BIRTHS.

CROLY.—On the 15th inst., at Harcourt-street, Dublin, the wife of Henry Gray Croly, F.R.C.S.I., of a son.

FOSTER.—On the 10th inst., at Knowle, the wife of Reginald H. Foster, M.R.C.S.E., of a son.

LA FARGUE.—On the 10th inst., at Godalming, the wife of George Frederick Heriot La Fargue, M.D., of a son.

PERRY.—On the 15th inst., at Queen's-terrace, Glasgow, the wife of Robert Perry, M.D., of a daughter.

WALKER.—On the 11th inst., at The Grove, Portland, the wife of George E. Walker, L.R.C.P.L., of a daughter.

WILKIN.—On the 18th inst., at Holmhurst, Beckenham, the wife of J. F. Wilkin, M.D., of a son.

MARRIAGES.

ELLIOT—RUTTLEDGE.—On the 23rd inst., at St. George's Church, Bloomsbury, by the Rev. F. E. H. Payne, Henry George Elliot, L.R.C.S.I., of Gateshead-on-Tyne, to Mary Withers Ruttledge, eldest surviving daughter of the late T. Ruttledge, of Ingatestone, Essex.

LITTLETON — REVELL.—On the 18th inst., at St. Stephen's-by-Saltash, Cornwall, by the Rev. H. Anthony Noel, M.A., William Littleton, M.R.C.S.E., of Saltash, son of the late Nicholas Littleton, M.R.C.S.E., to Grace Eugénie Revell, of Saltash, only daughter of the late Andrew Smith, M.C., R.N. No cards.

PITMAN—JAMES.—On the 18th inst., at St. Mary's, Islington, by the Rev. E. H. Fothergill, M.A., Robert Pitman, of Acacia House, Highgate-hill, to Esther Hannah, widow of the late Mr. James, of Manor-road, Upper Holloway, and youngest daughter of R. T. L. Eakle, Esq., of Holloway. No cards.

DEATHS.

BOWLBY.—On the 15th inst., at Totnes, Henry Bowlby, M.R.C.S.E., formerly Surgeon H.E.I.C.'s service, aged 70.

DUKE.—On the 14th inst., at Corne Abbas, Robert Rawson Duke, L.R.C.S.I., aged 30.

FINDLAY.—On the 16th inst., at Aberdeen, George Findlay, M.D., aged 35.

FRENCH.—On the 14th inst., at Summerhill, Dr. Peter French, late of Wigan, aged 31.

GRIFFITHS.—On the 11th inst., at Eye, Herefordshire, John Griffiths, Surgeon, aged 82.

HEELAS.—On the 7th inst., at Fellows-road, South Hampstead, Martin Luther Heelas, M.R.C.S., aged 33. Friends will please accept this intimation.

HOLDERNESS.—On the 5th inst., at New Windsor, William Brown Holderness, M.R.C.S.E., aged 76.

HUNTER.—On the 7th inst., at Glasgow, Matthew Hunter, M.D., aged 38.

LUTHER.—On the 5th ult., at Southwick, Sussex, Charles William Luther, M.D., aged 65.

MILLER.—On the 16th inst., at Sutherland-crescent, Helensburgh, John Miller, M.D., J.P., late of Rothesay, and formerly of Madeira, aged 70.

MURIEL.—On the 1st inst., at Ely, William Muriel, M.R.C.S.E., Commander R.N., aged 82.

STEEL.—On the 11th inst., at Blaenavon, Richard J. P. Steel, M.D., aged 65.

TURNBULL.—On the 9th inst., at Cambuslang, Lanarkshire, John Turnbull, L.F.P.S.G., aged 72.

[N.B.—*A fee of 5s. is charged for the insertion of Notices of Births, Marriages, and Deaths.*]

Notes, Short Comments, and Answers to Correspondents.

STORAGE OF DRUGS IN THE CITY.

THE *British Trade Journal* lately described the warehouse accommodation provided in London by the East and West India Dock Company for the drugs imported by vessels using the docks. The more costly products are stored in a warehouse in Billiter-street, where may be seen large quantities of musk, vanilla, ambergris, and the essential oils. Each package of musk is carefully sorted, and every individual pod subjected to close scrutiny; for the wily Chinaman is in the habit of introducing foreign substances into the pods, and closing them up again. Ambergris, the base of so many scents, is sometimes sold for five guineas an ounce. The largest drug store, however, is in Fenchurch-street, where there are immense rooms and cellars crammed with the produce of many climes, and the money value of the drugs here accumulated is said to be little short of fabulous. Articles like jalap, ipecacuanha, and aloes are kept in different rooms, placed in tiers of packages. Of ipecacuanha-root alone, the stock is valued at £9000, and it sometimes reaches £18,000. China rhubarb, in consequence of its somewhat nauseous and penetrating smell, has a small building set apart for its reception. The present stock is about 850 cases, of the average value of £16 a case. The work of sorting and classifying samples is responsible, and requires much experience and discrimination. Public sales take place every fortnight, and prior to these the bulk of goods down for disposal may be seen by intending purchasers. The warehouse is fitted with a complete museum, containing specimens of nearly every article in the Pharmacopœia.

Inquirer.—There is no antidote to carbolic acid. Warm water should be given freely, and afterwards albumen—eggs diluted with cold water.

Mr. M. Tester should take the advice of his medical attendant.

AERATED WATERS IN INDIA.

SOME little time ago a good deal was written by our contemporaries on the quality of the aerated waters sold in Calcutta, Bombay, Madras, &c. They were alleged to be, as a rule, so contaminated with sewage as to be highly dangerous. The alarm of the Anglo-Indians was great, and the statements were largely made use of to promote the sale of imported waters. To disprove the charge of impurity, samples were collected in Calcutta from places where the use of foul water was most probable, and submitted to exhaustive analysis, a printed report of which has now reached us. It appears that, as far as the aerated waters of Calcutta are concerned, there is no ground whatever for the imputation of unwholesomeness on the score of sewage contamination. On the contrary, there is proof that excellent water is used in the manufacture even of those samples which were most open to suspicion. On the other hand, the drinks were found to contain lead in quantities sufficient to produce serious effects on the human system. The analyst, Mr. Pedler, is perfectly satisfied that the lead in the soda-water bottles must be introduced during the manufacture, as he has frequently tested the Calcutta hydrant water, and never succeeded in detecting the slightest trace of lead. The probable explanation of the presence of the metal is that the carbonic acid gas is forced into the water through foul leaden pipes.

Unproductive.—We never recommend a particular physician or surgeon.

STRANGULATED HERNIA.

To the Editor of THE LANCET.

SIR,—The letter in your issue of the 11th instant from Mr. John North, Acting Civil Surgeon, Coimbatore, in regard to a case of strangulated inguinal hernia operated on by him, is one of great interest. "The scrotum was packed tight with a sharply-bent knuckle of intestine and gangrenous omentum. The bowel was congested only, apparently having been protected by the omentum." The fact that, in an entero-epiplocele in a state of strangulation, the omentum and gut may suffer in very different degrees is an important practical one, and has been impressed strongly upon my mind by the experience of two cases.

Two years ago I operated on such a case, and found the gut almost natural in appearance, while the omentum was deeply congested. I argued to myself (and I argued wrongly) that as the gut was in such a healthy state, the omentum probably looked worse than it really was, and I returned them both into the abdomen. For a day the patient remained well, but was then attacked with most acute peritonitis, and died about twelve hours afterwards.

After death, examination showed that the omentum had become gangrenous, and appeared to have been the starting-point of the peritonitis. The part of the gut which had been in the hernial sac was so unchanged as to be quite indistinguishable from the rest of the intestines.

Five days ago I operated on another similar case at the infirmary, with the assistance of Mr. Clark, Lecturer on Anatomy. The gut was congested, but in quite a satisfactory state for returning into the abdomen. The omentum was in a state of incipient gangrene. I accordingly transfixed its base, after dragging it well down with a double antiseptic catgut ligature, and secured each half in a firm knot, cutting away the omental mass immediately below, and returned the ligatured stump. The operation was conducted under a spray of carbolic acid, and dressed antiseptically. The patient has not had a bad symptom; the bowels have been twice freely moved, and the wound is superficial, free from all inflammatory action, and has not furnished a drop of pus.

Omentum may be removed after antiseptic ligature with so great security that I feel sure it is well thus to deal with it when decidedly congested, even although it lie side by side with apparently almost uninjured gut.

I am, Sir, yours &c.,

HECTOR C. CAMERON,
Surgeon to the Glasgow Royal Infirmary, and Lecturer on Surgery, Glasgow Royal Infirmary School of Medicine.

Glasgow, Nov. 14th, 1876.

M.D. (Rotherham) is informed that the distribution of the Hospital Sunday Fund is not in return for "each guinea" collected, because there are so many institutions who have no guinea scale. In last year's published Report, and it will be the same, we understand, in that for the present year, it is stated: "Letters of recommendation for in- and out-patients to the various hospitals and dispensaries enumerated in the Appendix will be given, on their application, to ministers, and others so far as the supplies in the hands of the Secretary will admit." It is to be noticed that no letters are given unless applied for.

"A CAUTION."

To the Editor of THE LANCET.

SIR,—I wish Mr. Larkin's letter to you in last week's LANCET could have been published a few days earlier, as it might have saved me losing a valuable surgical pocket-case and a great coat. Mr. Larkin's patient paid this neighbourhood a visit last Wednesday evening between six and seven o'clock, calling on, to my knowledge, six medical men. I, unfortunately for myself, was the only one who happened not to be at home. Being left a second alone, when my servant went to inquire when I should be in, he walked off with the articles I have mentioned. He gave to those medical men he saw the same story—that he had only been married three months, had come from Jersey, and did not want a visit paid for an hour, giving an address in the neighbourhood.

Yours faithfully,

Northampton-park, Canonbury, N., Nov. 21st, 1876. T. HAMILTON.

*** We have heard also from gentlemen living in Bow-road, Camden-town, Fitzroy-square, and Canonbury, to the effect that the same trick as that related last week by Mr. Larkin had been played upon them, and unfortunately in two instances the thief succeeded in his object of robbery. We trust the publicity given to the individual's plans will put the profession on their guard.—ED. L.

TYPHO-MALARIAL FEVER.

DR. ESTLANDER, Professor of Surgery in the University of Finland, made some interesting remarks at the International Medical Congress, Philadelphia, in connexion with the reading of Dr. J. Woodward's paper on Typho-malarial Fever, an abstract of which is published in the *Boston Medical and Surgical Journal* for the present month. Prof. Estlander stated that at certain periods malarial fever was very common in Finland, particularly on the southern coast, and that at other periods it disappeared altogether. During the last years of the decade from 1850 to 1860 it raged there with great intensity; but from 1862 to 1868 it disappeared so completely that not a single case was to be met with at the hospitals. From the last-named year until the present time it has again attacked that part of the country very severely; but it seems to be now fast decreasing. As to the endemic causes of this periodicity, the professor pointed out that during the short summer the average stand of the barometer is high, the stand of the water is low, and the bottom of the sea is uncovered in the numberless small creeks and bays in the Gulf of Finland. No tide is perceptible there, and the bottom lies exposed in the sunshine, forming a rich source of miasmatic exhalations. When, on the contrary, the average stand of the barometer is low, all is covered with water, and the summer is rainy and cold, but free from this fever. Typhoid fever may be called endemic in Finland; for cases of that fever occur every year, and at every part of the year, although with varying intensity. At periods when malarial fever is very intense, cases are often seen exactly like those described by Dr. Woodward. These occur mostly in spring and autumn, and particularly in the month of August, which in that country of short summers is considered as part of the autumn. For this reason this fever is called "Augusti fever." Prof. Estlander added that he was glad to accept the name "typho-malarial fever" to designate it as a hybrid of the typhoid and malarial forms.

CHLORAL HYDRATE IN EPILEPSY.

To the Editor of THE LANCET.

SIR,—The following case may possibly be interesting to the profession, and if you think it worth inserting I shall be obliged.

F. C——, aged forty-four, a gentleman under my care, and a resident in my house, has suffered from epileptic attacks, unaccompanied with softening or paralysis, for some years. He has been sixteen years leading a seafaring life, and, like too many of that class, very much addicted to drinking habits, which at the present time he will indulge in if not checked. Was a few days since, during my visit to a few patients, seized in my conveyance with an epileptic attack, which was followed in quick succession by several others, amounting altogether to nine. Finding that the attacks had in a great measure affected his intellect, and that he was acting like an insane person in every particular, I determined on trying what effect chloral would have in the case; so about 11 A.M. I gave him twenty-five grains of chloral hydrate, which had very little perceptible effect, and he still kept on throughout the day talking incoherently, and going on like a person bereft of his senses. At 10 P.M. I had him put to bed, and administered forty grains of chloral, and had him carefully watched. This dose slept him up to 2.30 in the morning, when he got up, tried to dress himself, and leave the house, saying it was time to get up and go for a walk; also that he was on board ship, the vessel was sinking, &c, and, in a word, displaying great disturbance of his mental faculties. I then, finding that great irritability still continued and exhaustion, gave him thirty grains of chloral, and added to it a fourth of a grain of morphia. Soon after taking this third dose he fell asleep for some hours, and woke up quite restored, and in every way himself again, and I am happy to say continues so.

You will perceive that ninety-five grains of chloral hydrate, besides the morphia, were taken within fifteen hours, and with the happy issue of knocking down a state of things which otherwise might have had a very serious termination. The case also clearly shows what large quantities of powerful sedatives can be taken with safety under such circumstances. The gentleman is at present taking the bromide of potassium, with tincture of nux vomica, &c.

Yours faithfully,
J. WRIXON,
One of the Medical Officers to the Watford Union.

Sarratt, near Watford, Herts, Nov. 9th, 1876.

GRENADA.

A CORRESPONDENT is anxious to obtain information respecting this West Indian island, with a view to medical practice in the colony.

M.B., C.M.—Gentlemen, merchants, bankers, and professional men, from 15*s.* to £1 1*s.* per diem. Travelling expenses not more than 6*d.* per mile one way.

SANITARY CONDITION OF EAST AND WEST HAM.

To the Editor of THE LANCET.

SIR,—In your impression of the 18th instant I notice the following paragraph:—

"We are informed that numerous cases of typhus and enteric fever have occurred lately in the East and West Ham districts, and that the local authorities are not taking adequate measures to arrest the extension of the maladies."

As the medical officer of health for the parish of West Ham, I was sorry to see a report in print so entirely without foundation, and I shall be greatly obliged if you will tell me your informant, that I may have an opportunity of investigating the matter, especially as I consider the latter part of the paragraph reflects chiefly upon me in the position I hold.

I am, Sir, yours faithfully,
THOS. DRAKE, M.R.C.S.,
Medical Officer of Health to the Parish of West Ham.

Stratford, E., Nov. 22nd, 1876.

*** The information was obtained from a presumably authentic source. We are glad to receive so emphatic a contradiction from the medical officer of health.—ED. L.

CHINESE OPIUM.

A CONSULAR Report dealing with China, just issued, presents the public with some information on the cultivation of opium in China. It is evident that the native production of the drug is increasing throughout the country, and that it begins to hold its own against imported Indian opium. The contingency long ago pointed out by Sir Rutherford Alcock—viz., the possibility of the Indian supply being entirely superseded by the native produce—does not now appear so far off. The consumption of the drug is enormous. Smoking it has become an inveterate habit with a very large section of the people, and the Government does not interfere with the vice beyond the issue of periodical warnings, which are quite unheeded.

A CASE OF HEPATIC ENLARGEMENT OCCURRING IN FŒTAL LIFE.

To the Editor of THE LANCET.

SIR,—On the first evening of this month I was called to attend MRS. C——, a multipara, who had been in labour seven hours. She affirmed that she was only eight months gone. The enlargement of the abdomen was excessive. She also complained of an unusual quantity of "show," and the chamber utensil held quite a couple of ounces of blood. On examination I found the head in the right occipito-cotyloid position. The pelvis was roomy, and the fœtal skull rather small, less resistant, and the sutures sharper, than usual. The os was well dilated. The breasts had gradually become flabby for the last fortnight. On withdrawing my examining finger it was covered with pure blood, and blood oozed out externally at every pain. I could pass my finger with little difficulty between the fœtal skull and the pelvic rim; but above that limit a peculiarly hard, globular mass seemed to completely fill the cavity of the uterus. Percussion externally over the site of the child's abdomen was dull and resistant. The hæmorrhage showing no sign of cessation, and the pains continuing severe, but yet giving little progress, I decided to rather deliver by the forceps than turn, and accordingly despatched a messenger for them; but, it being a long distance from home, an hour elapsed before he returned. As grasping the womb squeezed much blood past the large body of the child, I meanwhile made an endeavour, of the success of which I was extremely doubtful, to remove the child, and therefore passed up two fingers of each hand, and applied them to the sides of the head under the malar and zygomatic projections, and after considerable efforts, with the pains, extracted a dead, cachectic female child, which I separated as rapidly as possible from the mother. The hæmorrhage at once became appalling. My left hand externally discovered the obscure uterine walls, while the right passed internally scooped away the already detached placenta, with numerous large clots. By kneading the womb, and applying cold cloths to it, and pouring strong brandy-and-water down the patient's throat, the uterus began to assume a firmer shape; but at any temporary relaxation of my firm hold, bleeding began afresh. In an another hour I was enabled to apply a firm binder, and leave her. It being rather late, I deferred any examination of the child and placenta till the following day.

Glancing at the dead child, its abdomen presented a remarkable similarity to that of a woman far advanced in pregnancy. The swelling was hard and dull in front, and above completely filled the upper four-fifths of the ventral cavity. Below and laterally a little tympanites revealed the presence of the displaced intestines, partly collapsed, and partly containing meconium, no doubt. In this region also was a little fluid. The greatest girth was in the line of the navel. The cord was bloated in one place for the length of three inches, being twice the thickness of my middle finger. When separated I noticed there was no eversion of the navel. Just to the left of the median line the finger sank into a deep, wide fissure, and on either side the large hepatic lobes could be traced of an almost stony hardness, and very smooth. Nothing else but this organ was discoverable in the upper four-fifths of the abdomen. Otherwise there was nothing remarkable in the child beyond a general cachectic appearance. A post-mortem examination could not be obtained.

The placenta was very soft and friable, rather large, and studded with numerous cysts, varying in size from a pin's-head to a walnut; the larger ones generally being formed by the coalescence of one or more smaller ones. They generally contained a reddish gelatinous matter.

The patient has latterly been subject to an ulcerated throat and loss of hair. There is no eruption or desquamation. No history of cancer in the family, which seems to have been healthy.

I remain, Sir, yours truly,
London, Nov. 8th, 1876. LESLIE L. THAIN, M.R.C.S. Eng., &c.

Mr. A. B. Verity.—A guinea, we believe, is usually paid; but we are not aware that there is any absolute authority on the subject other than that of the gentleman who taxes the costs.

TREATMENT OF SCARLET FEVER WITH SULPHUR.

To the Editor of THE LANCET.

SIR,—The marvellous success which has attended my treatment of scarlet fever by sulphur induces me to let my medical brethren know of my plan, so that they may be able to apply the same remedy without delay. All the cases in which I used it were very well marked, and the epidermis on the arms in each case came away like the skin of a snake. The following was the exact treatment followed in each case:—Thoroughly anoint the patient twice daily with sulphur ointment; give five to ten grains of sulphur in a little jam three times a day. Sufficient sulphur was burnt twice daily (on coals on a shovel) to fill the room with the fumes, and of course was thoroughly inhaled by the patient. Under this mode of treatment each case improved immediately, and none were over eight days in making a complete recovery, and I firmly believe in each it was prevented from spreading by the treatment adopted. One case was in a large school.

Having had a large experience in scarlet fever last year and this, I feel some confidence in my own judgment, and I am of opinion the very mildest cases I ever saw do not do half so well as bad cases do by the sulphur treatment, and, as far as I can judge, sulphur is as near a specific for scarlet fever as possible.

Trusting that those who try it will report their cases,
I remain, Sir, your obedient servant,
Clifton, Nov. 14th, 1876. HENRY PIGEON, M.R.C.S. Eng., &c.

THE PREFERENCES OF PATIENTS.

Mr. John Robertson.—There is nothing in the fact that Dr. B. has been previously called into consultation with Dr. A. in the case to make it proper for him to refuse to take charge of it, or for Dr. A. to withdraw his feeling of friendship for Dr. B. Of course we are supposing that Dr. B. is in general practice, and has acted throughout in a perfectly professional manner. This granted, the only question which remains for either Dr. A. or Dr. B. is, What is the wish of the patient? Dr. A. may naturally be unwilling to lose a patient, and Dr. B., if a right-minded man, will be unwilling to supersede a friend with whom he has had a courteous consultation; but the freedom of choice of the patient must be maintained, and no practitioner should wish to retain a patient who has a decided preference for the attendance of another practitioner. Self-respect and the dignity of the profession both point to the propriety of respecting promptly the wishes of the patient.

S. F. W.—An order of the Local Government Board has the force of law, and must be acted upon.

GANGLION OF THE HAND TREATED BY EXCISING A PORTION OF THE SAC.

To the Editor of THE LANCET.

SIR,—According to Erichsen there are two forms of ganglion: the first, simple, and consisting of a cyst on the tendon; and the second, compound, and formed by the sheath of the tendon. In the case to be reported the ganglion evidently belonged to the latter variety: for the sac was formed by the fibrous sheath, whilst a portion of the index tendon of the extensor communis digitorum could be seen in the interior and deepest part of the tumour.

Miss B——, aged eighteen, called on the 8th September, 1875, wishing to have a ganglion on the back of the left hand, near the wrist, punctured, as it was causing weakness and deformity of the hand. It had existed for about three years, and made its appearance after a fall. Six months ago it was punctured by an eminent surgeon in town, and a blister afterwards applied; but now it was even larger, she said, than before the operation. The tumour was elastic, about the size of a pigeon's egg, could be moved from side to side, but not upwards nor downwards. After applying an elastic band, an incision in the direction of the extensor tendons of the index-finger was carried through the skin and sac, and followed by the evacuation of about two drachms of a thick crystalline fluid. The sac-wall was hard and resilient, and as if composed of a thin section of horn. A portion of the sac was snipped out, iodine applied, and the skin brought together by carbolised catgut sutures. Two days afterwards the sutures were removed, as they were causing some irritation of the skin, and strips of plaster applied instead.

Sept. 19th.—Edges united. Carbolic-acid lotion was used in dressing the wound.

March 25th, 1876.—As there was a very slight swelling, an ointment containing iodine, lead, and opium was prescribed.

Some weeks afterwards I again saw the case, and all that remained was a node of the size of a split-pea.

This operation seems most applicable, however, to large ganglia which have resisted other methods of treatment, and are unsightly, or interfere with the movements of either the wrist or fingers.

I am, Sir, yours &c.,
Edinburgh, November, 1876. G. R. GILRUTH, L.R.C.S.E.

ABSCESS AND LIPOMA.

To the Editor of THE LANCET.

SIR,—*Apropos* of your remarks in THE LANCET of Nov. 11th, page 683, on the occasional great difficulty of distinguishing between abscess and lipoma, I may relate a case that occurred to me lately.

A young man, aged seventeen, consulted me about a swelling, which had existed on the left side of his neck more than a year. The swelling was very hard, and extended from the mastoid process to the clavicle along the sterno-mastoid muscle. Feeling certain it was a deep subfascial abscess of the neck, I opened it above and below, and let much pus out. I then left in a drainage-tube from one opening to the other. In about seven weeks the lump had almost gone, and only a little thin fluid came out of the lower opening; so I took out the drainage-tube to allow the openings to heal, which they did in a few days. In three weeks he turned up again, saying that "since the closing up of the openings another lump had formed in the neck." I examined his neck, and found a lump, the size of a hen's egg, just above the clavicle, behind the insertion of the sterno-cleido-mastoid. It was not painful, seemed elastic, and not feeling the slightest doubt but that it was a "residual abscess" arising from the first, I at once laid it open. Not a drop of pus escaped, and upon examining the cut t was easy to see that the lump was a lipoma, the connective tissue, capsule, and the fatty lobules being as characteristic as possible. Where did the tumour come from? Three weeks before, when taking out the drainage-tube, I had examined his neck with the greatest care, and had found nothing of the kind; yet in three weeks he comes with a lipoma, forming a lump of the most obvious kind, the size of a hen's egg. Yours obediently,
Blackpool, Nov. 13th, 1876. WM. HARDMAN.

VACCINATION AND REVACCINATION WITH GLYCERINED LYMPH.

To the Editor of THE LANCET.

SIR,—Having read in your last impression a long letter from Mr. Purvis, public vaccinator, on "Vaccination with Glycerined Lymph," I wish to inform him that I have vaccinated as well as revaccinated with glycerine mixed with lymph at least 1500 boys and men in Japan and China as far back as 1864 when in the flag-ship on that station; also at home in a training-ship in the years 1870 and 1871. The idea was not my own; but fortunately I saw a letter in THE LANCET, giving the profession the result of this system of revaccination, which I gladly put to the test, being very "hard up" for lymph; and I may say, as far as I can recollect (having narrowly watched each case both at home and abroad), the result was the production of perfect vesicles. Hence, in my opinion, our mild attack of the epidemic in Japan and China. Yours &c.,
Nov. 19th, 1876. FLEET SURGEON, R.N.

A Victim.—We are very sorry for our correspondent; but there seems no possible cure for the evil of false representations of the value of practices but greater vigilance on the part of purchasers. If the representations were really fraudulent, our correspondent would have his remedy in law, though, alas, in this matter the remedy is often worse than the disease.

THE BRIDGEND AND COWBRIDGE UNION.

To the Editor of THE LANCET.

SIR,—In your issue of the 11th instant appears an advertisement for a medical officer for the western district of the Bridgend and Cowbridge Union. Area, 29,604 acres; population 9630. Salary £58 per annum.

I wish to draw the attention of Poor-law medical reformers and those whom it may concern, not only to the farce, but to the injustice necessarily inflicted on the poor by such remuneration, as it cannot possibly secure adequate and proper attendance. It is well known that parochial medical officers are never overpaid for their services; yet from the following figures the salary offered by the Bridgend and Cowbridge Union will not bear comparison with those of other unions, even some in the adjoining counties, to wit:—

	Area.	Population.	Salary.
Bromyard	55,963	9981	£268
Hereford No. 2 ...	26,966	5021	105
Hereford No. 3 ...	18,702	5008	100
Ledbury	29,838	9622	225
Ross No. 3	15,210	5332	80
Ross No. 4	15,710	3208	70
Wells No. 3.....	14,846	5253	70
Wells No. 4.....	16,158	5402	80

In the Ledbury Union, drugs and medical and surgical appliances are supplied by the guardians. In the Ross and Wells, the guardians supply and dispense all the medicines. I could give numerous other instances of the superior pay in English unions, and would ask, Are the poor Welsh paupers less worthy of consideration than their English brethren that such anomalies should exist under the Poor-law administration?

Having reaped some bitter experience in a district similar to the one advertised, I would caution young aspirants against accepting office on such terms, provided they wish to discharge their duties conscientiously.

I am, Sir, yours faithfully,
November, 1876. MAURICE G. EVANS, M.D.

THE SALICYLIC ACID TREATMENT OF RHEUMATIC FEVER.

To the Editor of THE LANCET.

SIR,—On Oct. 28th, Police Constable G. C—— applied at my surgery for relief from pains in the knees. The patient was evidently feverish, but his temperature was not taken. Ordered fifteen grains of bicarbonate of potash every three hours, and to go home to bed at once, as he might expect an attack of rheumatic fever.

Oct. 29th.—I was sent for at 9 A.M; but being engaged, sent six powders of twenty grains each of salicylic acid, with directions to take half a powder every two hours. On seeing him a few hours after, I found he had taken one powder every two hours without feeling any uncomfortable symptoms. Pulse full, 92; temperature 104·5°; urine scanty, loaded; ankles, knees, hips, wrists, and shoulders swollen and tender; could hardly bear the bedclothes, and a heavy step across the floor made him cry out. He said the pain had been worse before taking the powders, and every powder made him feel easier. To continue powders, twenty grains every two hours, and poppy-head fomentations. No heart symptoms.

30th.—Had slept several hours; eructated a mouthful of food once; no other sickness from powders. Pulse 78; temperature 102°; urine as before. No pain in right side; left ankle better; no heart symptoms. To continue acid in ten-grain doses.

31st.—Had slept well; appetite good; no sickness. Pulse 78; temperature 99°; urine plentiful, amber; no pain anywhere; no heart symptoms. Having no more salicylic acid at hand, I ordered a mixture containing a solution of perchlorides of iron, ten minims every three hours.

The patient has had no more symptoms, and seems strong again (Nov. 9th).

From the beginning of the attack to the recovery may be called three days. Yours &c.,
West Hartlepool, November, 1876. E. M. S.

HOW IS THE SMALL-POX CIRCULATED?

To the Editor of THE LANCET.

SIR,—Last week a patient from Clapham called to consult me, complaining of pains in the back and limbs, simulating rheumatism. In the course of conversation she mentioned there was a good deal of small-pox in her neighbourhood. I proposed, if she had any fear of it, to at once vaccinate her, as I always keep a fresh supply of matter from week to week. She said she would consider about it between that time and her next visit on Monday. On Saturday evening I got a telegram from her, stating the medicine I had prescribed had brought out a rash all over her, and wished me to visit her at once. Being engaged at a midwifery case until late, I did not go to see her until Sunday morning, when I found the rash was small-pox. How had she got it? I may mention that I went by the Clapham tram car; two fellow-passengers got out at the same place as myself, and on my return they re-entered the same car, having just been to visit a child at the Stockwell Hospital for Small-pox, as proved by one of them having a printed paper which had been given them there, and, as I understood by their conversation, one of them had visited a child suffering from the disease, whilst the other waited in a cold waiting-room. The printed paper was perfumed with camphor, which was to be taken by the friend visiting the hospital the next day.

Now, the question arises in my mind, how many parents visit their friends and children, go and return by these trams, and thus render the other passengers liable to the contagion. When I mentioned it to my patient, she at once imagined she had got it in this way, and I think persons so visiting the hospital should be very careful not to ride in the trams or omnibuses, and so circulate such a contagious disease.

I am, Sir, your obedient servant,
Welbeck-street, W., Nov. 15th, 1876. JAS. HADAWAY, L.R.C.P. Ed.

LYMPH FROM THE COW.

WE are requested to state that Dr. Wilkinson, of the Caledonian-road, has a cow with cow-pox under his observation, and is prepared to supply some lymph from the cow to a few practitioners.

X.—The smaller Woolff's bottles in Ludwig's apparatus have a capacity of about one pint; the large pressure-bottle of about one gallon. The "warm chamber" is about two feet square. The mercurial manometer is not specially constructed. Our correspondent will observe that there is not much difference between the two statements given in his letter.

Mr. E. G. Barnes, (Eye.)—In due time.

MEDICAL ATTENDANCE ON CLUB PATIENTS.

To the Editor of THE LANCET.

SIR,—In reply to your correspondent, "Hibernian," I beg to say I am the medical officer to several large clubs, including branches of the Foresters and Odd Fellows. I have a distinct understanding with each of my clubs that patients suffering from venereal diseases, from delirium tremens or other illness distinctly produced by drinking, or from any accident received whilst in a state of intoxication, is neither entitled to club pay nor to my attendance. I would venture to suggest that it is better to inform the patient on his first application that he is not entitled to the club doctor's attendance, and then he cannot complain at a charge being made, which he might do with some show of fairness if a distinct understanding was not first arrived at.

Yours truly,

November, 1876. M.D.

CORRIGENDA.—In Mr. Edmund Owen's communication on "Gunshot Injury to the Musculo-Spiral Nerve," which appeared in the last number of THE LANCET, p. 709, a line in the fourth sentence of the third paragraph of the second column, was inadvertently transposed. The passage should read thus: "The middle of the bicipital region is occupied by an extensive and irregular puckering, the scarred surface in places being red and hard. It showed where the charge had passed through the limb, destroying in its course the chief part of the biceps."—In an annotation on "Hæmophilia," published last week, p. 727, col. 1, line 14 from bottom, omit (?), which was inserted in error.

COMMUNICATIONS not noticed in the current number will receive attention in our issue of the ensuing week.

COMMUNICATIONS, LETTERS, &c., have been received from—Dr. Broadbent, London; Mr. Gamgee, Birmingham; Dr. Buzzard, London; Dr. Madge, London; Dr. Williams, London; Dr. Shepherd, London; Mr. Praeger, Hitchin; Mr. Farr, London; Dr. Toms; Dr. Moss, Dublin; Mr. Gunson, London; Mr. Rothenheim, London; Mr. Moloney, London; Mr. Dilton, London; Mr. C. Daruty, Leith; Mr. North; Dr. Thomas, Southampton; Dr. Walter, Long Eaton; Dr. Brunton, London; Dr. Ward, Oxford; Mr. Footner, Romsey; Mr. Claremont; Mr. Shaw; Dr. Drake, Stratford; Dr. Verity; Mr. Slimon, Bow; Dr. Cran; Mr. Pink; Mr. Cavendish, Stamford; Dr. Eberle; Mr. Bland, Taunton; Mr. Edwards; Mr. Ford; Mr. Reynolds, Richmond; Mr. Chapman, Carlisle; Dr. Warren, Paris; Mr. Naden, Sheffield; Dr. Brisbane, London; Mr. W. J. Clarke, London; Mr. Armstrong, Newcastle; Mr. Churton, Leeds; Dr. Thomson, Peterborough; Mr. Partridge, Banstead; Mr. De Wolfe, Tintern; Mr. Pearson, Oxford; Dr. Goldie, Leeds; Dr. Heynes, Eversley; Mr. Bramsby, Peterborough; Dr. Payne, Calcutta; Mr. Force, Exeter; Dr. Hamblen, Iowa, U.S.A.; Mr. Owen, London; Mr. Henderson, Leeds; Mr. Wesley, Wetherby; Mr. Dixon, Oldham; Messrs. Clew & Co., Paris; Dr. Carruthers, Edinburgh; Mr. M'Caskie, Huddersfield; Mr. Richards, Huddersfield; Dr. Marshall, Nottingham; Dr. Blyth, Barnstaple; Mr. Moore, Bampton; Mr. M'Calman, Strone; Dr. Walters, Reigate; Mr. Tester, New Barnet; Mr. Pain, London; Mr. Martin, St. Helens; Dr. Collie, Homerton; Dr. Trentler, Fletching; Dr. Bradburn, Eccles; Messrs. Rimmington and Sons, Bradford; Dr. Chalmers; Dr. Orchard, Pendleton; Dr. Lakin, Leicester; Dr. Roe, Totnes; Dr. Monckton; The Secretary of State for the Colonies; G. H. P.; Enquirer; L. B. B.; A. B., Worksop; M.D.; Vieux Militaire; R. C. S.; A Regimental Surgeon; Unproductive; A Medical Student; M. O. H.; Registrar-General; B., Hull; M.R.C.S.; Dum Spiro Spero; J. J. J.; Hector; Pharmacy; &c.

LETTERS, *each with enclosure*, are also acknowledged from — Mr. Foster, Knowle; Dr. Wood, Bromsgrove; Mr. Phillips, London; Mr. Dicey, Northampton; Messrs. Slinger and Co., York; Mr. Ramsden, Chester; Mr. Nicholson, Sheffield; Mr. Parrott, Sheffield; Mr. Richards, London; Dr. Hickey, Cape of Good Hope; Mr. Hexlas, Wokingham; Mr. Dearden; Messrs. Roberts and Co., Fourcroses; Mr. Dickinson; Mr. Breumer; Dr. Mackenzie, Normanton; Mr. Owen; Mr. Molyneux; Mr. Roberts; Mr. Davidson; Mr. Rains; Dr. Tennent, Leyland; Mr. Kitts, Sunderland; Dr. Flowers, Market Rasen; Dr. Rowcroft, Wigan; Dr. Maynard, Bishop Auckland; Dr. Madeun, Ashbourne; Mr. Littleton, Saltash; Mr. Young, Chilton Polden; Mr. Hamilton, Swadlincote; Mr. Wall, Wigan; Nemo; Alpha; L. W. H.; F. N., Liverpool; J. H.; Omega; J. D., Trowbridge; Henricus, Halifax; Alpha and Omega; Medicus, Pickering; E. A., Oakham; Beta, Darwin; E. P.; B. M., Glasgow; Sid; Medicus; A. Z., Amersham; B. A., Oxford; F.R.C.S., Notts; Z. Z. Z.; M.D., Exeter.

Newcastle Chronicle, Liverpool Post, Western Morning News, Welshman, East London Observer, Metropolitan, Argus, Surrey Advertiser, Record, Sunday Daily Press, Leeds Mercury, Manchester Guardian, Cork Constitution, Hampshire Post, Dundee Evening News, Western Mail, and *Essex Daily News* have been received.

METEOROLOGICAL READINGS

(Taken daily at 8 a.m. by Steward's Instruments.)

THE LANCET OFFICE, NOV. 23RD, 1876.

Date.	Barometer reduced to Sea Level, and 32° F.	Direction of Wind.	Wet Bulb.	Dry Bulb	Solar Radia. in Vacuo	Max. Temp. Shade	Min. Temp	Rain-fall.	Remarks at 8 A.M.
Nov. 17	29·79	W.	50	52	...	58	50	...	Overcast
,, 18	30·09	S.W.	51	52	...	57	47	...	Overcast
,, 19	29·83	S.W.	48	50	...	56	46	0·18	Cloudy
,, 20	29·73	N.W.	46	49	...	51	45	...	Overcast
,, 21	30·00	N	44	46	...	50	43	0·06	Overcast
,, 22	30·29	S.E.	42	45	...	45	43	...	Overcast
,, 23	30·21	S.E.	37	40	...	41	38	...	Overcast

Medical Diary for the ensuing Week.

Monday, Nov. 27.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10½ A.M. each day, and at the same hour.
ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1½ P.M. each day and at the same hour.
ST. MARK'S HOSPITAL.—Operations, 9 A.M. and 2 P.M.
METROPOLITAN FREE HOSPITAL.—Operations, 2 P.M.
MEDICAL SOCIETY OF LONDON.—8½ P.M. Dr. Lichtenberg will exhibit a Lad on whom Excision of the Ankle-joint has been performed, with Removal of the greater part of the Os Calcis."— Dr. Edmunds: "A second Case of Cæsarean Section, in which Mother and Child survived."

Tuesday, Nov. 28.

GUY'S HOSPITAL.—Operations, 1½ P.M., and on Friday at the same hour.
WESTMINSTER HOSPITAL.—Operations, 2 P.M.
NATIONAL ORTHOPÆDIC HOSPITAL.—Operations, 2 P.M.
WEST LONDON HOSPITAL.—Operations, 3 P.M.
ROYAL MEDICAL AND CHIRURGICAL SOCIETY.—8½ P.M. Mr. Hulke, "On a Case of complete Absence of both the Upper Limbs." — Mr. M. Baker, "On the Employment of Flexible Tubes in Tracheotomy."—Mr. Hulke: "Lodgment of a Tracheotomy Tube in the Right Bronchus and its Extraction."

Wednesday, Nov. 29.

MIDDLESEX HOSPITAL.—Operations, 1 P.M.
ST. MARY'S HOSPITAL.—Operations, 1½ P.M.
ST. BARTHOLOMEW'S HOSPITAL.—Operations, 1½ P.M., and on Saturday at the same hour.
ST. THOMAS'S HOSPITAL.—Operations, 1½ P.M., and on Saturday at the same hour.
KING'S COLLEGE HOSPITAL.—Operations, 2 P.M., and on Saturday at 1½ P.M.
GREAT NORTHERN HOSPITAL.—Operations, 2 P.M.
UNIVERSITY COLLEGE HOSPITAL.—Operations, 2 P.M., and on Saturday at the same hour.
LONDON HOSPITAL.—Operations, 2 P.M.
SAMARITAN FREE HOSPITAL FOR WOMEN AND CHILDREN.—Operations, 2½ P.M.

Thursday, Nov. 30.

ST. GEORGE'S HOSPITAL.—Operations, 1 P.M.
ROYAL ORTHOPÆDIC HOSPITAL.—Operations, 2 P.M.
CENTRAL LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M., and on Friday at the same hour.

Friday, Dec. 1.

ST. GEORGE'S HOSPITAL.—Ophthalmic Operations, 1½ P.M.
ROYAL SOUTH LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M.

Saturday, Dec. 2.

ROYAL FREE HOSPITAL.—Operations, 2 P.M.
CHARING-CROSS HOSPITAL.—Operations, 2 P.M.

NOTICE.

In consequence of THE LANCET being frequently detained by the Post Office when posted for places abroad *more than eight days after* publication, subscribers and others are reminded that such copies can be forwarded only as book packets, and *prepaid* as such.

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